

**ON THE BORDER IN EVERGLADES AND DRY TORTUGAS:
IDENTIFYING FEDERAL LAW ENFORCEMENT PERSPECTIVES ON
RESPONSE TO CUBAN IMMIGRANT LANDINGS IN SOUTH FLORIDA'S
NATIONAL PARKS**

A Thesis

by

AMANDA LEIGH BENTLEY

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE

August 2011

Major Subject: Recreation, Park and Tourism Sciences

On the Border in Everglades and Dry Tortugas: Identifying Federal Law Enforcement
Perspectives on Response to Cuban Immigrant Landings in South Florida's National
Parks

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Approved by:

Chair of Committee,	Michael A. Schuett
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ABSTRACT

On the Border in Everglades and Dry Tortugas: Identifying Federal Law Enforcement Perspectives on Response to Cuban Immigrant Landings in South Florida's National Parks. (August 2011)

Amanda Leigh Bentley, B.A., Texas A&M University

Chair of Advisory Committee: Dr. Michael A. Schuett

Federal agencies operating along the border in southern Florida include the United States Coast Guard (USCG), United States Customs and Border Protection (USCBP), which is the parent agency for Border Patrol (BP), Immigration Customs Enforcement (ICE), and the National Park Service (NPS). Each agency has its own mission regarding immigration, and conflicts have emerged regarding responsibilities and responses to immigrant landings. The purpose of this study was to identify federal law enforcement perspectives about tactics for responses to Cuban immigrant landings within national parks in southern Florida. This study was motivated by the following research questions: 1.) How do the federal agencies operating along the southeastern border in Florida work together during responses to Cuban immigrant landings within national parks? 2.) What are the perspectives among agency personnel about tactics for response to Cuban immigrant landings within national parks? 3.) What tactics should be emphasized in future responses? The concept of shared mental models (SMM) provided a framework for the research, and data was collected through the Q method. Three

factors, or social perspectives, on responses to landings were revealed: 1.) React & Transport, 2.) Protect and 3.) Plan. Implications for managers, limitations and future research is discussed.

DEDICATION

To my family and friends, and to everyone who works tirelessly to preserve our freedom and our natural and cultural heritage.

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I would like to thank my committee chair, Dr. Michael Schuett, and my committee members, Dr. Matarrita, and Dr. Peterson for their invaluable guidance and support throughout the course of this research.

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NOMENCLATURE

BP	Border Patrol
DHS	Department of Homeland Security
DOI	Department of the Interior
DRTO	Dry Tortugas National Park
EVER	Everglades National Park
ICE	Immigration and Customs Enforcement
NPS	National Park Service
USCBP	United States Customs and Border Protection
USCG	United States Coast Guard

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1. INTRODUCTION

The United States shares terrestrial borders with Canada to the north and Mexico to the south, as well as marine border regions to the west, east and southeast. These borders are usually peaceful, but a rise in criminal activities has presented new management challenges for border protection agencies and land management agencies situated along the borders. The southwestern border receives attention from media and politicians, as well as academics, due to extreme violence perpetrated by drug cartels and gangs in northern Mexico. Other border issues include drug smuggling, human smuggling and human trafficking. These issues are cause for concern along any border where clandestine crossings, or border crossings that take place in secret, occur. According to Spener (2009), “the problem is not that authorities are unfamiliar with how migrants go about crossing the border, but rather that so many thousands do so annually with the support of many other thousands in the region that the authorities have been unable to put a stop to the practice” (p. 239).

The capacity for law enforcement officers to respond to immigration – whether they are legal or illegal acts of immigration – is an important aspect to understand along all borders, not just the southwest. This study focused on the southeastern border of the United States, specifically southern Florida. The panhandle of Florida is surrounded by the Gulf of Mexico to the west, the Straits of Florida to the south and the Atlantic Ocean

This thesis follows the style of Journal of Environmental Management.

to the east, making the border region both marine and terrestrial. Approximately 140 miles of coastline and 220,000 acres of coastal area are managed by the National Park Service (NPS). This includes coastline within the boundaries of Everglades National Park (EVER) and a cluster of islands 70 miles west of Key West, Florida called Dry Tortugas National Park (DRTO) (NPS, 2006a). DRTO is 90 miles north of Cuba and, according to personal communications with NPS managers, immigrant landings on DRTO have been consistently recorded since 2004. Immigrant landings within the boundaries of EVER have been consistently recorded since 2006. Both regions are used as landing sites for immigrants from Caribbean nations – particularly Cuba – because of their isolation and distance from major ports and cities which house these federal agencies: United States Customs and Border Protection (USCBP), which is the parent agency for Border Patrol (BP), United States Coast Guard (USCG), and Immigration and Customs Enforcement (ICE). As smaller parts of a larger organization, each agency carries out differing missions (see Appendix A).

The 1916 Organic Act tasks the NPS to care for special places saved by the American people so that all may experience their heritage (NPS, 2010). Since the creation of the NPS, ecological, social, economic and political drivers have forced the agency to adapt its management strategies to challenges such as shifting political administrations, economic recession, budget cuts and climate change. National parks along the U.S. borders are faced with new challenges like the incident in Organ Pipe. While not all people who cross the borders into the U.S. are criminal threats, immigration through national parks is a phenomenon that presents the NPS with new

management challenges. NPS law enforcement officers and other park personnel are the first responders to Cuban immigrant landings within national park boundaries. When landings occur, EVER and DRTO personnel report that they uphold an “all-hands-on-deck” policy because they do not know who they will encounter on the beach. This draws NPS personnel away from their regular daily tasks such as running the radar for speeding cars or patrolling the back country for illegal campers in EVER. DRTO personnel are drawn away from maintaining Fort Jefferson and the generator that powers the island, as well as patrols of the campground and harbor. DRTO law enforcement officers must detain and keep watch over groups of Cuban immigrants until USCG is able to respond. Some of these watches have lasted for more than 48 hours, which backlogs maintenance and patrols. Long watches also put DRTO law enforcement officers and other personnel at risk for fatigue and other health concerns.

It is unclear if some or all of the tasks NPS personnel are called to do during a response to Cuban immigrant landings fall within or outside the overall NPS mission – to protect natural resources for the enjoyment of future generations. This mission differs from the collective mission of USCG, BP and ICE under the Department of Homeland Security (DHS) – to secure the country and its freedoms. As these federal agencies continue to operate in southern Florida, conflicts have emerged regarding responsibilities and responses to Cuban immigrant landings.

In an effort to secure the United States after the incidents of September 11, 2001, DHS was created to prepare and respond to all hazards and disasters that threaten American citizens (DHS, 2010a). As existing agencies shifted and reorganized under

new direction, the missions of USCG, BP and ICE adapted to a more pointed focus on keeping terrorists out of the country and stopping criminals from crossing the borders into the U.S. USCG duties in the southeastern U.S. and Caribbean regions include patrolling the Caribbean Sea, intercepting drug smugglers and responding to environmental disasters. BP searches shipping ports, airports, train stations and bus stations for illegal immigrants, terrorists and drugs. ICE duties include drug seizures and court case preparations. Each agency's jurisdiction overlaps across southern Florida and the surrounding waters, including land and water managed by the NPS.

The NPS is a public land management agency within the U.S. Department of the Interior (DOI), whose mission is to protect America's natural resources and heritage, honor cultures and tribal communities, and supply the energy to power the future (DOI, 2010). The NPS has a dual mandate to preserve scenery and environments in such a way that allows people to enjoy them, yet leaves them unimpaired for future generations (NPS, 2008). Situated along sections of the border in southern Florida, EVER and DRTO are national parks that lie within the jurisdictions of USCG, BP and ICE. The activities of these agencies within the national parks are limited, however, by the shallow waters surrounding EVER and DRTO. USCG can not patrol shallow waters with the marine vessels it employs, and BP does not have marine vessels for patrol efforts.¹

The NPS does have the ability to enforce federal and state laws that fall outside the preservation mission including drug seizures and immigrant apprehensions, though

¹ The Office of Air & Marine (AMO) is a unit within USCBP that does have boats, but their mission is to chase and interdict vessels smuggling narcotics, not necessarily to assist transporting Cuban immigrants.

managers in EVER and DRTO report that they do not always have adequate law enforcement support to respond to such incidents. As explained by EVER managers during personal communications, law enforcement officers often call for support from DHS agencies when immigrants make it to dry land within EVER. The nearest BP station is a three hour drive away near Miami, so response time is long. The time it takes for back-up to arrive at DRTO depends on when the landing occurs, where the nearest USCG cutter is and whether or not that USCG can disengage from its operation at that time. Time, assets and workforce are critical elements of a response to immigrant landings, and they are often in flux, owing in part to the problems Cuban immigrant landings pose for each agency.

1.1 Need for the Study

NPS Southeast Regional Director David Vela wanted to understand how Cuban immigrant landings are impacting his law enforcement units in south Florida's national parks. Personal communications with NPS managers and other agency personnel indicated that Cuban immigrant landings affect at least three components of national park management: 1.) workforce, 2.) park operations, and 3.) interagency coordination. Discussions with EVER and DRTO managers revealed that landings affect employee retention, recruitment, safety and budgets. It was reported that park operations can be temporarily neglected when immigrants land within EVER and DRTO boundaries. Discussions also revealed a desire among the NPS workforce to coordinate with other federal agencies in response to Cuban immigrant landings in EVER and DRTO. All agency representatives discussed the issue of "mission creep," which describes occasions

when individuals act outside the original mission of their agencies (Monahan & Palmer, 2009). As national park managers face increasing budget cuts and shifting management strategies in the coming fiscal years, it is necessary to gain a better understanding of how federal agencies can work together in response to Cuban immigrant landings within national parks. Investigations like this have been conducted along the southwestern border with public land management agencies and border protection agencies, but this was the first comprehensive investigation of federal agencies along the southeastern border and their response to Cuban immigration.

1.2 Purpose of the Study

Given the stress on the NPS workforce and evidence of mission creep during immigrant landings in national parks, the purpose of this study was to identify perspectives among federal agency personnel about tactics for response to Cuban immigrant landings in south Florida's national parks.

2. LITERATURE REVIEW

A broad scope of national park studies includes literature on law enforcement and encroaching urban activities such as gang violence and break-ins, as well as increasing international activities such as drug smuggling, human smuggling and trafficking, legal and illegal (or undocumented) immigration, international immigration policies and border enforcement. The following review of national park studies, migration studies, border agencies and their missions will provide the context of the research and position the study in a gap in the existing literature.

2.1 National Park Law Enforcement

Since the inception of the National Park Service and the early days of the Buffalo Soldiers' role as our national parks' first rangers, national park law enforcement officers have upheld the dual mandate to ensure public enjoyment and protect the parks' natural settings (Pendleton, 1998). While this mission remains the same, the paradigm of public land management has shifted from a historical focus on providing recreation opportunities and resource protection to a current emphasis on visitor safety (Wynveen et al., 2007). Those tasked with enforcing the law within park boundaries have adapted to changing levels and types of crime, from illegal poaching in the late 1800s, vandalism, break-ins and other crime associated with parks near urban settings (Wynveen et al., 2007), to increasing numbers of marijuana plantations in the 1980s to present day (Kirkwood, 2005). In order to understand law enforcement officers' ability to deal with these crimes, Chavez, Tynon and Knap (2004) identified key characteristics

of success in law enforcement in another public land management agency, the USDA U.S. Forest Service. These characteristics include:

force of personality (attention to an area depended on individuals, not policies); resources (e.g. money and people); persistence (planning, consistency and visibility); collaboration (within the Forest Service, with other law enforcement agencies, with community and volunteer groups, and with recreation visitors and recreation clubs); and communication (communication plan, getting the word out to the public, reliability and consistency) (p. 22).

Chavez et al. (2004) also found that the U.S. Forest Service should consider forging relationships with other agencies before problems arise, and that such efforts go beyond normal law enforcement duties, but they contributed to success.

NPS law enforcement officers may also work with other agencies in response to crime. According to Director's Order #9 (DO-9) 2.2, NPS law enforcement maintains authority within and outside park boundaries. Within national park system boundaries, the NPS may deputize another agency's qualified law enforcement personnel as special police when it will benefit the administration of a park area. Deputations may be issued only for the purpose of obtaining supplemental law enforcement assistance when deemed economical and in the public interest, and with the concurrence of the other agency. Outside park boundaries, the NPS is also authorized to use appropriated funds for cooperative assistance to nearby law enforcement and fire prevention agencies, but NPS personnel may not enact arrest authority (NPS, 2008). Today, NPS law enforcement officers serve the public interest to protect resources and people, prevent crime, conduct investigations, apprehend criminals, and serve the needs of the visitors (NPS, 2006b). This mandate results in multiple enforcement techniques, including soft

enforcement, or education, prevention, community relations, and hard enforcement, or stern warnings, citations, and arrests (Pendleton, 1998).

According to Pendleton (1998, p.522), “soft enforcement facilitates an enjoyable park experience, in part, by avoiding the formal tactics most often associated with traditional police strategies.” Visitors expect park rangers to be the “camper’s friend” whose presence can some times improve the quality of their visit (Swearingen, 1995). However, as cities continue to sprawl toward protected areas, crimes normally associated with urban settings have increased in protected areas, such as drug manufacture and gang activity (Chavez and Tynon, 2000). Practicing hard enforcement in response to serious crimes has been deemed appropriate in the parks by some, while others oppose the shift in favor of retaining the public servant image of park rangers with soft enforcement (Pendleton, 1998). Philley and McCool (1981) examined the level of criminal activity within a national park unit, the perception of this activity held by each unit’s administrators, and the aggressiveness of enforcement activities employed within a unit. The authors found that “crime perceptions are only slightly associated with law enforcement practices, and...consistently aggressive law enforcement practices apparently do not exist” (p. 368).

In a more recent study, Wynveen, Bixler and Hammitt (2007) examined changes in perceptions of national park law enforcement officers over a 25-year period, depending on the park unit’s proximity to an urban area. The authors endeavored to replicate the Philley and McCool (1981) study, and found that NPS superintendents and rangers do not perceive that the severity of enforcement they advocate has changed in a

quarter of a century. However, the author's findings were similar to the results of previous studies showing that the closer a park is to an urban area, more intense law enforcement techniques are used to respond to 'urban crime' (Wynveen et al., 2007).

Other challenges facing law enforcement officers in land management agencies include the proliferation of marijuana plantations and the armed criminals who guard them. Many of the apprehended individuals who were involved with marijuana plantations in national parks such as Sequoia and Yosemite have ties to crime syndicates in other countries or are undocumented immigrants, themselves (Kirkwood, 2005). Additionally, federal agencies have been called upon to take up responsibility for terrorism prevention. Terrorists might seek to imbed themselves with large groups of undocumented immigrants during clandestine border-crossings or they might employ the assistance of a human smuggler in order to enter the U.S. (Ordonez, 2006). This is one of many issues facing agencies situated along the U.S. border.

2.2 Border Issues

Borders are political lines drawn between nations with the purpose of defining a country's terrestrial and marine territory. Some boundaries are disputed, but most are held in place by treaties between neighboring nations. As globalization increases, nations learn much about other nations' power by understanding their capacity to control the flow of people and resources across their boundaries (Herbert, 2008). Arguably, undocumented border-crossings threaten a nation's or a state's power by undermining the right to control who crosses its borders (Koser, 2010).

Issues surrounding political borders include international relations, security, political economy (Andreas, 1998;1999), clandestine and undocumented border-crossings (Spener, 2008), also referred to as irregular migration by Koser (2010), human smuggling, human trafficking and drug smuggling (Decker, 2008; Hickman & Curtis, 2008; Zhang, 2007). Within the United States, the federal government has passed immigration policies and reform aimed at reducing the amount of undocumented border crossings and punishing employers who hire undocumented workers which, according to Hagan and Phillips (2008), “reflects the struggle between the inclusionary (nation of immigrants) and exclusionary (border integrity) elements of political thought in U.S. immigration policy” (p. 84).

2.2.1 Drug smuggling

According to DHS, “ICE agents participate in an average 21 drug seizures each day, totaling more than 3,560 lbs. of marijuana, 11.8 lbs. of heroin, and 663 lbs. of cocaine, USCBP agents seize an average of over 7,000 pounds of narcotics daily, and USCG personnel seize or remove an average of 1,000 pounds of illegal drugs” (2010b, http://www.dhs.gov/xabout/gc_1212011814375.shtm). Local, state and federal law enforcement agencies in all 50 states respond with drug interdiction efforts (Layne et al., 2001). This has come to be known as the “War on Drugs” (Decker, 2008). Many scholars and agencies have invested time in bettering our understanding of the impact of drug interdiction efforts (Decker, 2008; Layne et al., 2001; Rovner, 2008).

Some scholars have attempted to understand who drug smugglers are and how they operate by interviewing the drug smugglers themselves (Decker, 2008). While most

research has focused on the southwestern border and some work has focused on the northern border with Canada, there are few studies that have examined smuggling along the southeastern border of the U.S. There is a need to understand how smugglers operate along the mostly marine southeastern border, as opposed to the terrestrial southwestern and northern borders. It has been found that smugglers do not perceive much of a threat on the water because they believe that law enforcement lacks the necessary assets to spot them (Layne et al., 2001). If smugglers are spotted, they are certain law enforcement can't catch them (Layne et al., 2001). Drug smuggling involves migration because people are doing the smuggling and, at times, are crossing borders, but not all migration involves drugs.

2.2.2 International migration

Motivating factors for human migration include growth of international inequality, transnational social networks and labor shortages (Zhang, 2007). People who engage in cross-border movement but do not intend to settle permanently in a new country are described as migrants in most literature, while people who make a definitive move to the new country are immigrants (Spener, 2009). Many scholars have studied the activities and implications of active immigration zones along political borders (Ordonez, 2006; Pena, 2009). Immigrants are described as asylum seekers, economic refugees, religious refugees (Haines & Rosenblum, 2010), environmental refugees (Bates, 2002), communist refugees, and legal, illegal or unauthorized immigrants (LeMay, 2007; Struve, 2008). In the context of immigration into the United States, we understand American attitudes toward refugees, how immigration categories can fuse with other

core social categories (Haines & Rosenblum, 2010), and how the different categories and descriptive terms applied to immigrants function in public discourse (Struve, 2008). According to LeMay (2007), unauthorized immigration primarily includes two types of movement into the United States:

- 1.) the undocumented, also known as “illegal immigrant,” who comes into the country without paperwork or authorization,
- 2.) the visa overstayer, or the migrant who enters the country with a valid but temporary visa, who then stays beyond the terms of the visa.

Koser (2010) adds types of unauthorized immigration:

- 3.) people moved by migrant smugglers or human trafficking,
- 4.) people who deliberately abuse the asylum system.

Human smugglers are paid to help migrants gain illegal entry into a country while human traffickers take control over the persons being smuggled in order to exploit them against their will (Spener, 2009; Zhang, 2007). In any attempt to reach southern Florida, smugglers and migrants alike must cross the Caribbean and the Straits of Florida.

2.3 Migration to the U.S. from the Caribbean

The Caribbean is a large body of water southeast of the Florida peninsula. U.S. territories within the Caribbean include Puerto Rico and the Virgin Islands, and island nations in the area include Jamaica, Cuba, Haiti, and the Dominican Republic. Other island chains in the region include the Lesser Antilles, Barbados and Trinidad and Tobago. This study will focus on migration from these regions into southern Florida.

Legal immigration policy for the United States is established by the Immigration and Naturalization Act of 1965. In 1966, the Cuban Readjustment Act changed Cuban refugee status from “economic” to “communist.” This meant that Cubans were identified as refugees fleeing a communist country, but all other Haitian or Dominican refugees were still identified as refugees fleeing poor economic situations (LeMay, 2007).

In 1994, President Bill Clinton’s administration met with the government of Cuba to discuss immigration policies. Through the Cuba-United States Migration Accord, the U.S. committed to process a minimum of 20,000 Cuban migrants each year, Cuba pledged to discourage irregular and unsafe departures, the U.S. began returning Cubans interdicted at sea, and Cuba agreed to take no action against the returnees (DOS, 2000, http://www.state.gov/www/regions/wha/cuba/fs_000828_migration_accord.html). A loophole was identified in the agreement, in that the U.S. agreed to return Cubans interdicted at sea. If Cubans make dry land, they may stay in the U.S. as communist refugees. This came to be known as the “wet foot, dry foot” policy. However, this policy applies to Cubans only; any Haitians, Dominicans and other economic refugees fleeing poor financial situations are returned to their home country. Immigration agencies in southern Florida are faced with two immigration scenarios: Cubans, who want to be found upon arrival to the U.S. and have their status adjusted to eligibility for permanent residence, and all other Caribbean immigrants who maintain “illegal” status and do not want to be found upon entry into the U.S.

The scope of the issues in southern Florida is broad; social issues encompass the national parks, local communities and Cuban immigration, and political issues abound in

the international relationship between the United States and Cuba. These political issues are larger than what the researcher can approach with this study. This study is not about immigration or whether it is right or wrong; it is about how federal agencies and law enforcement units can and can not work together in response to Cuban immigrant landings.

2.4 Coordination

Cuban immigrant landings present a unique situation in southern Florida. While immigrants of all other nationalities flee from their landing sites and attempt to blend into society as quickly as possible, Cuban immigrants actually want to be found by authorities upon entering the United States. Often times, Cuban immigrants land on isolated beaches within national park boundaries. The immigrants have no means of transporting themselves to an immigration processing facility, so incident response must take place. Response to immigrant landings is usually carried out by various agencies' law enforcement officers, but when landings occur in areas where agency jurisdictions overlap, responsibilities for response begin to overlap, as well. In order to better understand inter-agency coordination, we can look to past studies on emergency response to crises such as natural disasters and human-caused incidents.

2.4.1 Emergency response management

According to Boin and Hart (2010), the terms 'crisis,' 'emergency' and 'disaster' can be used interchangeably, and to manage such events is to prepare for and respond to unscheduled, undesirable, urgent and threatening contingencies. Characteristics of crises, disasters and emergencies include inflicting psychological and physical damage and

stripping organizations of available resources (Boin & Hart, 2010), negatively disrupting the state of social and economic conditions (Kapuchu, 2005), requiring coordination of actions among multiple organizations and integrating multiple agencies and jurisdictions into a functioning response system (Kapuchu, 2009).

Cuban immigrant landings may not share certain elements of crises in that they do not always inflict severe psychological or physical damage to those in the vicinity of the incident or to those who respond to it, but they do strip organizations of available resources and require urgent coordination of actions among multiple organizations. Coordination of actions in response to emergencies generates incident organizations and disaster management systems (Smith & Dowell, 2000). Emergencies are not static events, however; they are constantly evolving, therefore response systems should be able to evolve and adapt, as well (Kapuchu, 2009). According to Smith and Dowell (2000), “the problem of inter-agency coordination lies in the interaction between the structure of the emerging disaster management system and the techniques of individual and team decision-making” (p. 1154).

2.4.2 Federal agency coordination

In 2004, the U.S. Government Accountability Office noted that land management agencies and agencies under DHS were not coordinating effectively where their missions and areas of responsibility overlap. In her study on public lands and border enforcement at the U.S.-Mexico border, Piekielek (2009) cited differing missions, agency culture and views of space as reasons for conflict. While the DHS aligns the regional structures of the agencies under its authority, the NPS is not under DHS’s authority and could

possibly remain unaligned without action to that end (Desai, 2005). At the same time, park managers seeking assistance from DHS in response to border crossings and immigrant landings fear losing their autonomy as they carry out the NPS mission in public lands along U.S. borders (Piekielek, 2009). Norton (2009) suggested that “contestation among organizations often involves a significant amount of time...and a temporally oriented view of organizational structures is necessary if we are to understand multistakeholder interaction in the development and implementation of policy initiatives” (p. 543). The implication is that some of the organizational politics and agency culture have become ingrained over time, and possibly present a barrier to coordination.

3. CONCEPTUAL FRAMEWORK FOR THE STUDY

The main types of interagency relationships include cooperation, conflict, competition and merger source. As Akinbode and Clarke (1976) point out, conflict arises when there are differences in goal and method conception, and preferences of interacting organizations. This can also be described as the absence of a shared mental model, or SMM. SMMs provide team members or coordinating personnel with the same understanding of who is responsible for what task and what everyone's information needs are (Stout, 1999). SMMs also provide a conceptual framework for examining the perspectives of agency personnel regarding responses to immigrant landings in southern Florida's national parks.

The theory of shared mental models suggests that team members hold compatible mental models which lead to common expectations for the task and team (Cannon-Bowers, 1993). Borrowing from the Rouse and Morris (1986) definition, Cannon-Bowers (1993) defined mental models as "mechanisms whereby humans generate descriptions of system purpose and form, explanations of system functioning and observed system states, and predictions of future system states" (pg. 226). *Shared* mental models (SMM) are:

knowledge structures held by members of a team that enable them to form accurate explanations and expectations for the task, and, in turn, to coordinate their actions and adapt their behavior to demands of the task and other team members (Cannon-Bowers, 1993, pg. 228).

In other words, a SMM is a perspective informed by knowledge and observations that provides a source for expectations about a given task and guides coordination for completing the task.

Other scholars contend that people hold multiple mental models, particularly within complex systems (Cannon-Bowers, 1993; Rouse and Morris, 1986; Stevens and Collins, 1980). As Cannon-Bowers (1993) explains, complex situations require multiple mental models: participants must understand the equipment they use to interact and gather information, the task and how to accomplish it, their role in the task and how to interact with other participants, as well as the knowledge, skills and attitudes of their teammates.

Following Cannon-Bowers' (1993) interpretation of SMM theory in terms of expectations, it is the expectations that must be shared – not necessarily the mental model. This is because “the most important function of SMMs is that they lead to common expectations of the task and team” (pg. 235). Arguably, coordinating a response to Cuban immigrant landings is difficult for agencies operating along the border in southern Florida if they do not share expectations about the response or understand who is responsible for what task. Therefore, this study is guided by the following research questions:

- 1.) How do the federal agencies operating along the southeastern border in Florida work together during responses to Cuban immigrant landings within national parks?
- 2.) What are the perspectives among agency personnel about tactics for response to Cuban immigrant landings within national parks?
- 3.) What tactics should be emphasized in future responses?

4.2 Data Collection

The research conducted in southern Florida was investigated with Q method. Q method was invented by William Stephenson in 1935 as a way to examine subjectivity (Brown, 1996), or a person's internal frame of reference (McKeown & Thomas, 1988). In other words, Q methodology does not measure anything objectively (Addams & Proops, 2000), but offers a way to rigorously and systematically examine human experiences and subjectivity by “enabling the participant to model his or her viewpoints on a matter of subjective importance through the operational medium of a Q sort” (McKeown & Thomas, 1988, pg. 31).

Q method is useful for identifying social perspectives about a particular conflict, and it has become more prevalent in natural resource studies. According to Addams and Proops (2000), Q methodology can reveal stakeholder perceptions in an environmental controversy and is an ideal tool to assess conflict and inform policy dialogue. Webler, Tuler and Krueger (2001) used Q method to understand perspectives on public participation in an environmental decision-making process, Tuler and Webler (2009) used Q method to reveal stakeholder perspectives about marine oil spill response, and Essen (2010) used Q method to identify knowledge communities in the sage grouse management conflict. Each study followed three phases: 1.) gather the concourse, 2.) generate Q sample, 3.) conduct Q sorts, and 4.) conduct post-Q sort interviews (see Figure 2). The concourse in a Q study is the population; it is a collection of all the comments and discourses about the study topic. Most Q studies collect verbal concourses, but a concourse may be comprised of pictures, objects or music pieces,

among others (van Exel, 2005). The Q sample is a subset of statements representing the concourse to be presented to the participants.

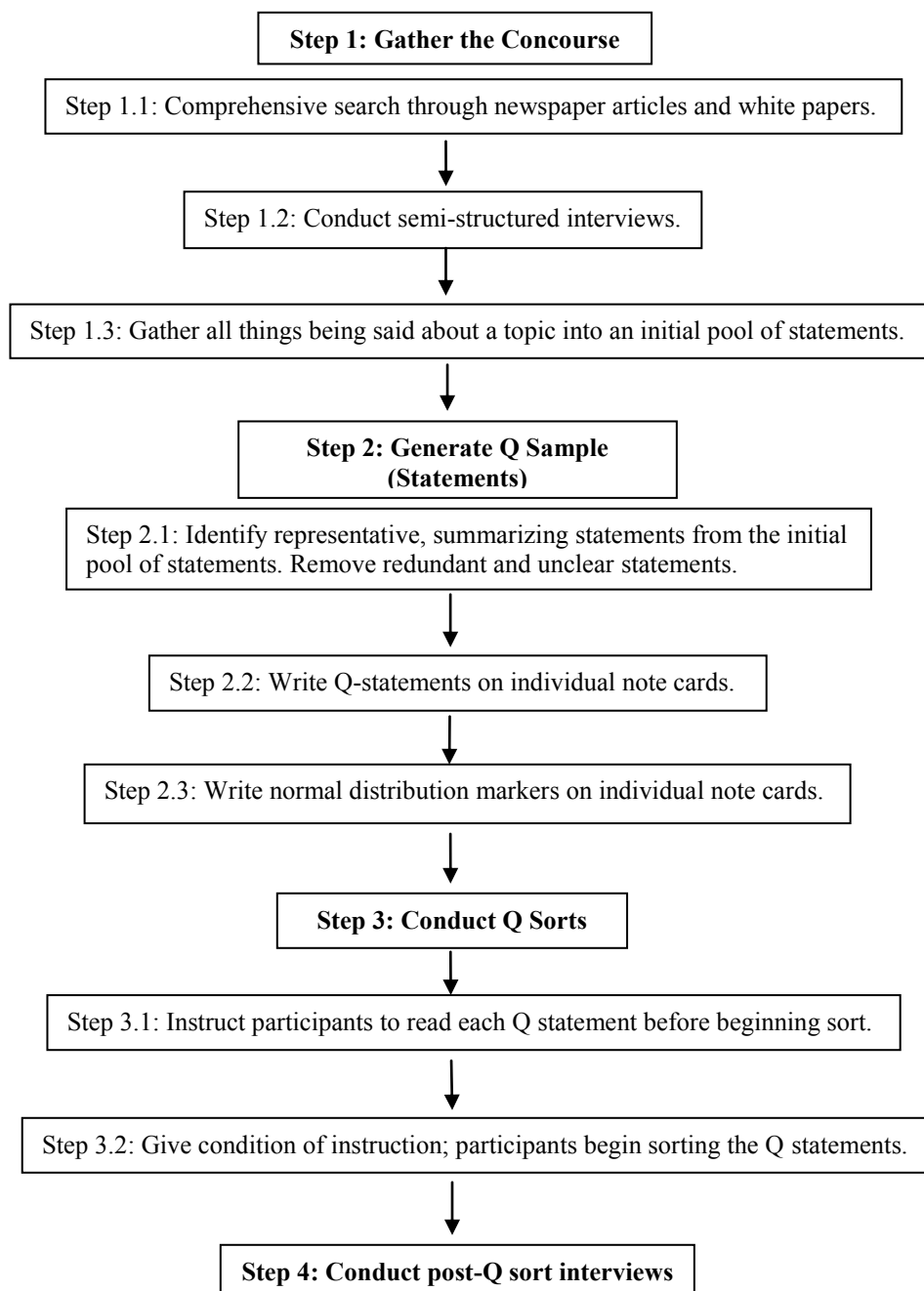


Figure 2: Four Steps in the Q Method Data Collection Process

According to du Plessis (2009, p. 142), “this entails the process of selecting or excluding statements...since the whole concourse cannot be administered because it may consist of hundreds of statements.”

The Q sort is the act of ranking the Q sample. Participants are given a deck of cards with one statement in the Q sample written on each card, which they are asked to sort across a rating scale. Post Q sort interviews are an opportunity for participants to explain why they sorted the statements in a particular way. Elaboration on the statements placed at the extreme ends of the rating scale is important information that will aid interpretation of the factors later (van Exel, 2005).

4.3 Step 1: Gather the Concourse

4.3.1 Relevant literature

First, a comprehensive search of relevant literature was conducted, including news articles from southern Florida. The search was conducted through ProQuest, an archive of newspapers, periodicals and other white papers. The search was narrowed to articles written from 1980 to present day, reflecting the time when Cuban immigrant landings became prevalent in southern Florida. Key words used to conduct the search included “Cuban immigration,” “immigrant beach landings,” “south Florida,” “border patrol,” “national parks,” and “law enforcement response.” The search produced 25 articles which were read by the researcher through November and December 2010, prior to arranging semi-structured interviews.

Statements and opinions regarding federal agency response to Cuban immigrant landings were pulled from the news articles and included in an initial pool of Q statements. This technique was employed by Tuler and Webler (2009) in their study on stakeholder perspectives about marine oil spill response objectives. The purpose of seeking statements from multiple sources was to ensure that as many perspectives as possible were represented in the Q sample.

4.3.2 Semi-structured interviews

Next, semi-structured interviews were conducted with key informants using snowball sampling. The purpose of these interviews was to ensure the richest sample of statements possible and to provide member-checks of the accuracy of the statements collected from relevant literature (Addams & Proops, 2000).

Beginning in December 2010, the researcher contacted a manager from the NPS, USCG, and USCBP via email to arrange an initial interview and to ask for referrals of other potential participants. The researcher scheduled 21 interviews based on the availability of each participant, and the researcher reminded participants of scheduled interviews via phone calls in January, 2011. One participant canceled their interview while the researcher was in the field, but a new participant was referred and a replacement interview was scheduled.

The interview guide was structured around four types of mental models that Cannon Bowers' (1993) hypothesized are useful for effective team performance: equipment, task, team interaction and team members (see Appendix B). Participants were asked to share their experiences of past Cuban immigrant landings, including the

equipment utilized, tasks carried out, interactions within and between teams and with team members. Interview questions were pre-tested and modified accordingly prior to actual data collection, and probing questions were used during data collection as appropriate. Interviews lasted an average 50 minutes each. Interviews were conducted in-person, audio-recorded and transcribed, and statements gathered from the interview were added to the initial pool – the concourse – of Q statements.

4.4 Step 2: Generate the Q Sample

Once the concourse was gathered into the initial pool of Q statements, a Q sample was generated. This entailed selecting representative, summarizing statements from the concourse to present to participants during the Q sort. Cannon Bowers' mental models for effective team performance provided a framework for drawing statements out of the concourse (see Table 1). Within these mental model types, knowledge categories specific to the situation in southern Florida were identified: interdiction, transportation, protect safety and health of responding personnel, protect the public, mitigate impacts on ecological resources, mitigate impacts on the budget, provide humanitarian aid, utilize available assets and technology, relationships, communication, utilize available personnel. As the researcher read through the concourse of relevant literature and interview transcriptions – the initial pool of Q statements – statements describing NPS, BP and USCG personnel knowledge, skills, and attitudes about response to Cuban immigrant landings were listed under the Team category. Any opinions and experiences describing relationships, communication and other interactions between agencies were listed under the Team interactions category.

Table 1: Q Statement Framework

Mental model category	Category elements
Team	Knowledge, skills, attitudes
Team interactions	Relationships, communication, utilize available personnel (cooperation)
Task	Interdiction, transportation, protect health and safety of responding personnel, mitigate impacts on the ecological resource, mitigate impacts on the budget, protect the public, provide humanitarian aid
Equipment	Utilize available assets and technology

Statements describing tasks to be accomplished during a response were listed under the Task category. All descriptions of equipment and any experiences with utilizing different technologies were listed under the Equipment category. Statements were edited for clarity and any redundant statements were removed from the list. In sum, the final Q statement list represented the knowledge, observations and expectations – mental models – that NPS, BP and USCG personnel have regarding tactics for response to Cuban immigrant landings. People can have multiple mental models about a topic, so the mental models for effective team performance (team, team interactions, task and equipment) provided the lens through which the researcher could look in order to investigate coordination between agencies and perspectives about tactics for response.

According to Brown (1980), generating the Q sample is more of an art than a science. Different investigators may use different structures to generate the Q sample, which may lead to different Q samples from the same concourse, but this is not a problem because 1.) investigators should always seek to generate a Q sample that is as

representative as possible, and 2.) eventually it is the subject who gives meaning to the Q statements by sorting them (van Exel, 2005).

For this study, the Q sample was constructed by the researcher to ensure statements from the interviews were evenly and completely included (Addams & Proops, 2000), and the Q sample was comprised of 31 statements. Each statement was written on an individual note card and each note card was numbered for reference. Three sets of 31 Q statements were made in order to accommodate multiple participants gathered at the same time and place.

As the assembled comments and observations about a topic, Q statements are the sample in a Q study, not the people who sort the statements (Tuler & Webler, 2009). For this reason, Q method is appropriate for studies involving a small number of key informants (Addams & Proops, 2000), and the next step was for those informants to perform Q sorts.

4.5 Step 3: Conduct Q Sorts

4.5.1 Selecting participants for Q sorts

According to Webler et al. (2009), the number of participants a researcher should select for Q sorting is a tradeoff between two rules:

The upper end is determined by the rule that it is wise to have more observations than variables in a study where statistics will be used to analyze the results...thus, for every three Q statements, have one participant. The lower end is...for each perspective, you want at least three people to load highly on it (p. 22).

In this study, the upper end was determined by the 1:3 ratio and 31 statements, so the researcher aimed for 10 or more participants to perform Q sorts. The lower end was

determined by the researcher's assumption that with two parent agencies operating in southern Florida – DOI and DHS – there might be two perspectives revealed in the study. For three people to load onto two perspectives, the rule shows that there should be a minimum six Q sorts for this study.

Participants from NPS and BP were selected through snowball sampling and based on their availability. Participants of the semi-structured interviews were eligible for participation in a Q sort. Seven personnel were available to conduct Q sorts: three from BP and four from NPS. No personnel from USCG were available to participate in Q sorts.

4.5.2 Conducting Q Sorts

The researcher arranged to meet with each participant and presented the Q statements written on individual note cards. The researcher read the following condition of instruction and guided each participant through the subsequent steps:

When you think about past Cuban immigrant landings, what are your expectations about your agency's procedural responses to future Cuban immigrant landings in national parks? Please sort the statements to indicate the tactics that you are least-likely to emphasize to most-likely to emphasize in a future responses to Cuban immigrant landings in national parks.

This condition of instruction was written to reflect the research questions and the theory of shared mental models (SMM), which suggests that team members hold compatible mental models which lead to common expectations for the task and team (Cannon-Bowers, 1993).

The participants were advised to read every card before sorting. Participants were also instructed to sort the statements into three piles, one pile for the statements they

that are not forced into a normal distribution as it will aid interpretation later (Webler et al., 2009).

Post Q sort interviews lasted an average 15 minutes and were audio-recorded and transcribed by the researcher. Quotes from the post Q sort interviews provide support and explanation of quantitative outcomes and are provided in the results section below.

5. DATA ANALYSIS

Once data collection was complete, the researcher referred to the notepad containing the seven recorded Q sorts and entered the order of each Q sort into a free software program called PQMethod 2.11. This software produces outputs geared to Q analysis, so it is easier to interpret than output from standard statistical software (Webler et al., 2009). Data analysis entails three steps: 1.) calculate a correlation matrix, 2.) compare Q sorts via Q factor analysis, and 3.) compute factor scores and factor arrays (McKeown & Thomas, 1988).

5.1 Calculate a Correlation Matrix

First, PQMethod 2.11 calculates an intercorrelational matrix. Here it is important to make the distinction between Q method matrices and R method (survey) matrices: “the psychometrics of Q call for the correlation and factoring of persons as opposed to tests, traits and the like...” (McKeown & Thomas, 1988, p. 46). McKeown and Thomas (1988) continued, “All observations in Q-technique are premised on a common unit of measurement, namely, “self-significance” (p. 48). In other words, Q studies correlate people and their opinions (Brown, 1980; Essen, 2010).

The correlation coefficients within the matrix illustrate which Q sort participants and their Q sorts correlate with each other. This procedure represents a transitional phase between raw data and factor analysis and is used only as a guide for further analysis (Brown, 1980).

5.2 Compare Q Sorts via Q Factor Analysis

PQMethod 2.11 offers two options for factor analysis: Centroid or Principal Component Analysis (PCA). PCA is the most common type of factor analysis (Webler et al., 2009; du Plessis, 2009), and it is “designed to assemble...groups of participants with similar perceptions based on the results of the Q sorts (Essen, 2010, p. 38). PCA in PQMethod 2.11 defaults to seven factors and upon the researcher’s execution of the function, the program will perform the factor analysis and display a table of eigenvalues (see table in Results section below).

Before proceeding with the rotation of factors for the best solution, the researcher must determine which factors should be included in the rotation through a variety of statistical and theoretical criteria (Essen, 2010; McKeown & Thomas, 1988). According to McKeown and Thomas (1988):

First, factors may be produced that are statistically significant but substantively without meaning...Second, the sole imposition of statistical criteria may lead one to overlook a factor that, although unimportant in terms of the proportion of the variance explained, nevertheless may hold special theoretical interest. (p. 51)

In other words, the researcher needs to extract significant factors for the next steps in data analysis. Statistical criteria include retaining factors with eigenvalues greater than or equal to one, the ‘scree’ test, where the number of factors extracted depends on locating a natural break in the sizes of the eigenvalues in a scree diagram, and extracting a factor if two or more Q sorts loaded significantly on it (Addams & Proops, 2000; Essen, 2010; McKeown & Thomas 1988). Theoretical criteria include the interpretability of different factor solutions (Essen, 2010) and the social and political

setting to which the factors are organically connected (Brown, 1980, p. 42; McKeown & Thomas, 1988).

5.2.1 Factor rotation

Once the significant factors have been extracted from the PCA, the researcher has two options for factor rotation: varimax or judgmental. The goal in factor analysis rotation is to find simpler, easily interpretable factors, while keeping the number of factors and communalities of each factor fixed (Addams & Proops, 2000, p. 28). The varimax method of rotation is a mathematical method that provides an orthogonal solution. According to Pleissi (2009), “this means that factors are rotated in such a way that they are always at right angles to each other, that is, the factors are uncorrelated” (p. 166). On the other hand, if a researcher has interest in a particular Q sort or theory, or if the researcher wants to account for as many Q sorts as possible in as few factors as possible, judgmental rotation might be the more appropriate action to take.

Once the factors are rotated, it is necessary to tell the PQMethod program how to define each factor. This is accomplished by “flagging” significant factor loadings, or normalized and weighted correlations between participants and factors (Essen, 2010; van Exel, 2005). Using the formula $1.96 * SE$ at the $p < .05$ level and $2.58 * SE$ at the $p < .01$ level, where $SE = 1 / \sqrt{N}$ and N = the number of statements in the Q sample, z-statistics are calculated (Essen, 2010; McKeown & Thomas, 1988; Webler et al., 2009).

5.2.2 Factor scores and factor arrays

Finally, once the significant factors have been rotated and the significant loadings have been flagged, PQMethod 2.11 can compute a set of factor scores for each

factor, which look like z-scores in the output. The factor scores show how each statement would rate on a factor if it was measured directly (Addams & Proops, 2000), and the factor arrays show what the ideal Q-sort looks like for each factor (McKeown & Thomas, 1988). It is on these factor scores and arrays that interpretations are based, and the reliability of the factors depends on how many participants define the factors. In other words, the more participants defining a factor, the higher the reliability (Addams & Proops, 2000, p. 32).

6. RESULTS

6.1 Correlation Matrix

The initial correlation matrix shows that a BP supervisor and NPS supervisor (Q sort participants 2 and 4) are highly correlated with one another, as well as the same BP supervisor and another BP supervisor (Q sort participants 2 and 7) (see Table 2).

Table 2: Correlation Matrix between Q Sort Participants

	Q sort participants						
Q sort participants	1	2	3	4	5	6	7
1 NPS_E3	1.00	.36	.27	.43	.45	.48	.25
2 BP_D2	.36	1.00	.44	.55	.42	.17	.54
3 BP_D3	.27	.44	1.00	.13	.09	.06	.13
4 NPS_E2	.43	.55	.13	1.00	.45	.45	.36
5 NPS_E1	.45	.42	.09	.45	1.00	.46	.30
6 NPS_E4	.48	.17	.06	.45	.46	1.00	.27
7 BP_D1	.25	.54	.13	.36	.30	.27	1.00

This correlation matrix is useful for illustrating which participants' Q sorts are similar, but it is the factor analysis which provides the structure – the groups or types of correlations – and the subsequent factor arrays and scores which are useful for interpretation.

6.2 Compare Q Sorts via Q Factor Analysis

In this study, PCA was employed for factor analysis. PQMethod 2.11 automatically defaults to seven factors for PCA. The results showed that two factors had eigenvalues greater than one (see Table 3). Before proceeding with factor rotation, statistical and theoretical criteria were considered for determining how many factors to

Table 3: Results of Principle Components Analysis (PCA)

Factor	1	2	3	4	5	6	7
Eigenvalues	3.0990	1.1723	0.8831	0.5972	0.5408	0.4689	0.2387
% expl. Var.	44	17	13	9	8	7	3

extract from the PCA results. The ‘scree’ test showed a natural break in the sizes of the eigenvalues between factors 3 and 4, indicating that factors 1, 2 and 3 could be extracted. Factors 1, 2 and 3 also had more than two Q sorts load significantly on them (see Table 3). Considering the social and political setting of the Q sort participants, extracting two factors for rotation revealed a solution that did not make sense regarding the combination of personnel and their corresponding Q sorts

Table 4: Factor Matrix with X Indicating Defining Sort Loadings

Q Sort Participants	Factors		
	1	2	3
1 NPS_E3	0.7590X	0.3534X	0.0800
2 BP_D2	0.2000	0.4577X	0.7681X
3 BP_D3	0.0415	0.9486X	0.1050
4 NPS_E2	0.5764X	0.0589	0.5308X
5 NPS_E1	0.6937X	0.0184	0.3291
6 NPS_E4	0.8427X	-0.0826	0.0712
7 BP_D1	0.1320	-0.0211	0.8649X
% expl.Var.	31	18	25

that loaded onto either factor. The interpretability of a four factor solution did not make sense either, considering the redundancy of meaning behind two factors. Therefore, it was determined that a three factor extraction and rotation was the appropriate solution.

6.2.1 Factor rotation

After the significant loadings were flagged in PQMethod, varimax rotation was employed. In this study, $SE = 1/\sqrt{31} = 0.1796$. The z statistic at the $p < .05$ level is $1.96 * 0.1796 = 0.35$ and the z statistic at the $p < .01$ level is $2.58 * 0.1796 = 0.46$. (* indicates multiplication) Thus, factor loadings equal to or greater than 0.35 and 0.46 were significant to the .05 and .01 levels.

6.2.2 Factor scores and factor arrays

Once the number of factors have been selected and rotated, PQMethod calculates factor scores and factor arrays for each statement. Factor arrays signify the importance or emphasis of a statement within each perspective. In this study, statements ranked with a factor array of 3 are statements that are most likely to be emphasized for each factor, or perspective. The factor array 3 corresponds with the distribution marker 3 on the ranking scale and all statements placed on the most-likely to emphasize side of the scale. Factor arrays of -3 are statements that are least likely to be emphasized, and they correspond with the distribution marker -3 on the ranking scale. More than one statement can be ranked with the same factor array, so z-scores provide more details as to the degree of emphasis for each statement, and they serve as a basis for ranking the importance or emphasis of each statement (Essen, 2010). For example, if two statements are both ranked with a factor array of 3, but the z-score for the first statement is 1.451 and the z-

score for the second statement is 1.389, then the statement with the higher score (1.451) is the most emphasized statement in the ideal Q sort for that factor. Attention is paid to statements with z-scores greater than 1 and less than -1. These statements are highlighted in gray in the tables below, and they indicate the *characterizing* statements for each factor.

Characterizing statements usually fall on the extreme ends of the ranking scale for a factor, and they are used to produce a first description of the point of view represented by that factor (van Exel, 2005). Characterizing statements are listed in the output from PQMethod upon completing factor analysis, rotation, and computation of factor scores and factor arrays. PQMethod also generates *distinguishing* statements and *consensus* statements, which are important aids for interpreting the results.

Distinguishing statements are significantly different from other factors and were treated differently by participants in the Q sorts (du Plessis, 2009). Consensus statements, however, maintain no significant difference between factors. A consensus statement fails to distinguish one factor from another because all factors may give a statement the same or similar score (du Plessis, 2009). Consensus statements provide an idea of where participants aligning with each factor may find some common ground and ideas about which they possibly agree, while distinguishing statements highlight areas of potential conflict. Both are important to consider during interpretation, but first there will be an overview of characterizing statements for each factor.

6.3 Characterizing Statements

6.3.1 Factor 1: React & Transport

Factor 1 explained 31 percent of the variance, and all four NPS personnel who participated in a Q sort aligned with this factor. The factor is named “React & Transport” because the characterizing statements reflect a desire to deal with immediate response issues first and foremost, including delegating transportation tasks. The most emphasized statement in the ideal Q sort for Factor 1 is: “When Border Patrol gets a report of a landing, it should be a priority for Border Patrol to get there,” which received the highest z-score (1.451) and rank (3) (see Table 5). Two of the most-emphasized characterizing statements (18 and 12) are distinguishing statements which significantly set this perspective apart from the other two factors. All distinguishing statements for Factor 1 are explained in the table on page 58. One of the most-emphasized statements (14) is a consensus statement which is non-significant and does not distinguish between any pair of factors. Consensus statements for all perspectives are explained in the table on page 62.

One of the least-emphasized statements (11) is also a distinguishing statement. The least-emphasized statement for Factor 1 is “Relatives should be notified immediately when their family/friends ‘make dry land,’” which received the lowest score (-1.845) and rank (-3). This is also a consensus statement.

Table 5: Characterizing Statements for Factor 1: React & Transport

Statement	No.	Rank	Z-scores
When BP gets a report of a landing, it should be a priority for BP to get there.	20	3	1.451
BP should drive to EVER and transport immigrants back to the BP station.	18	3	1.389
If an agency does not have the assets it needs, it should rely on other agencies' assets.	8	3	1.370
Decisions about tactics should be made by personnel on site.	5	2	1.321
At least one armed person should watch the immigrants all times.	14	2	1.308
There should be a pot of money designated for refunding manpower and equipment.	12	2	1.252
Officials from each agency should develop a procedure for response.	4	2	1.066
No agency should handle response to migrant landings alone.	2	1	0.984
Responding personnel should be prepared for the worst-case scenario.	15	1	0.917
DHS should compensate NPS for all immigrant transportation costs.	24	1	0.798
BP and NPS personnel should periodically co-patrol.	6	1	0.524
Staff should be allowed to build relationships with other agencies.	7	1	0.462
When appropriate, smugglers should be fined for damaging ecological resources.	13	0	0.313
Technology should augment personnel responsible for border protection.	27	0	0.256
Immigrants should be restrained with flexi cuffs.	28	0	0.195
Respond agencies should know the water and should be able to help without making things worse.	1	0	-0.260
Other agency personnel should come to my station see how short handed we really are.	21	0	-0.279
Agency personnel without law enforcement training should respond to landings in national parks.	3	0	-0.328
Immigrant "alienage" should be determined by BP or ICE only.	19	0	-0.490
The safety of the nation should come before preserving the parks.	10	-1	-0.508
Each agency involved should know about others' goals, issues and constraints.	31	-1	-0.533

Table 5: Continued

Statement	No.	Rank	Z-scores
Food and clothes should be provided for immigrants immediately after apprehension.	9	-1	-0.658
Immigrants who “make dry land” should be managed as a transportation issue.	22	-1	-0.856
Park visitors should help during responses to immigrant landings.	25	-1	-0.864
NPS law enforcement should pursue human smugglers.	17	-2	-0.870
Male immigrants should be separated from female and child immigrants.	23	-2	-0.987
BP and NPS assets should meet halfway during transportation of immigrants.	16	-2	-1.062
USCBP should focus on cross border criminal threats.	11	-2	-1.200
Responding agencies should rely on public transport to move immigrants.	30	-3	-1.336
NPS should be responsible for transporting immigrants to BP stations.	29	-3	-1.535
Relatives should be notified immediately when their family/friends “make dry land.”	26	-3	-1.845

Characterizing statements > 1/-1 are highlighted in gray.

Quotes from the four NPS personnel who aligned with this factor are included in the list below. Supporting explanations for the most-emphasized characterizing statements are listed first, followed by quotes and explanations for the least-emphasized characterizing statements. This qualitative data assisted with the interpretation of the factors which is included in the Discussion section of this thesis.

Most emphasized

No. 20: Once BP gets report of a Cuban migrant landing in a national park, it should be a priority for them to get there.

NPS_E1: Ultimately we're not set up to transport here...if we get 4 or 5 people, that's something we can handle. If we get 35, 45 people, we'll have to get every transportation rig in the park to try to get them up there. It's just not realistic. Whether it's Border Patrol sending somebody down or whatever, ultimately, to

get them out of the national park, someone else needs to help. We don't have the manpower or the resources to do that.

NPS_E4: Our emphasis has been at both parks the longer we have them the more resources it takes, the more money it takes, and the more humanitarian aid we have to offer them. To get them out as quickly as possible is our number one priority...it really takes away from our mission – our overall mission – the longer they're there.

No. 18: Border Patrol should drive to Flamingo Station in Everglades National Park and transport immigrants back to the Border Patrol Station.

NPS_E1: We just don't have the equipment or the manpower to transport more than a few people. I can fit three people, six people in a cage if they're small. Six is pushing it. Yeah, we just don't have the manpower or the resources, and the two landings that I'm familiar with were like, twenty plus people.

NPS_E2: Yes, they should be transported by Immigration or Border Patrol, and they should provide the right means of transportation. If we do it, we're going to be winging it. We don't have the means to do it, we'd just be trying to figure it out. When they show up they have vans that are set up for it and they know how to transport them and get them to the right facility. They're trained to do it.

No. 8: If an agency does not have the assets it needs to respond, it should rely on other agencies assets.

NPS_E1: I think that's a pretty big positive emphasis. We can do our part, they can do theirs. We don't have the same assets they do as far as large transportation rigs that can hold a lot of people, but they don't have shallow water boats that we have, so they're going to rely on us for certain aspects and likewise, we're going to rely on them.

NPS_E4: If we develop an interagency response plan, then we'll be able to rely on other agencies' assets. Individually, each agency is very short-staffed, there are financial constraints, collectively we could probably solve this issue and we could work it out. If we have one boat, Border Patrol has one boat, Coast Guard has one boat, that's three boats and that could really help. You probably double or triple the manpower by doing that.

No. 5: Decision about tactics should be made by personnel on site.

NPS_E2: Any time people are on site you try and get as much information as you can about what's going on, but in the end you're going to hold the people on site accountable for what's going on, so yes, they should be making decisions on site.

You can give them briefings and send them off, but on site they should be making decisions because they're the ones who are going to have to live with it if something happens.

NPS_E3: That's dictated by what resources you have, the location of the landing, all that kind of thing. You never know what you're going to get, so I think it's important that decisions be delegated down at the lowest level as possible because those are the people that really have to manage the incident. That pertains to any kind of incident management for us, I would think.

No. 14: At least one armed person should watch the immigrants at all times.

NPS_E3: There's about 3% of the Cuban migrants that are actually not permitted to stay in the United States because they've committed crimes in Cuba and that makes them ineligible for citizenship or alien status in the United States. We need to have some kind of security in place to manage that...so it's important that we protect our people as well as the other migrants if there is one person with a criminal record or is mentally disturbed or whatever.

NPS_E4: We place our officers in a very delicate position if we have one ranger like on the Yankee Freedom and forty migrants. They're very bad odds. I just don't like those odds. So, this is a critical officer safety issue.

No. 12: There should be a pot of money designated for refunding equipment and manpower.

NPS_E2: I know this could be done. There's no reason why that can't be done. The migrant landings is a money thing. There's one big lump sum of money that we have a big problem with all in one day, and we can't recover from it. It's hard to recover from that big lump sum money you throw at that one big landing or two big landings.

NPS_E4: These events cost us a lot of money. We do have that agreement with Homeland Security right now that does reimburse us. Again, it certainly helps because it does take a lot out of our budget, but I don't think it's the answer. I think boots on the ground, boats in the water, other agency response is a better solution than the reimbursement because the burden of the whole event still falls on us. It helps, but it's not the solution.

No. 4: Officials from each agency should develop a procedure for response to immigrant landings.

NPS_E4: If we could get together, Border Patrol, Coast Guard, local sheriff's office, whoever it may be, and come up with an overall Memorandum of

Understanding, Incident Action Plan, whatever we want to call it so that everybody has their roles and functions already lined out and we're not dealing within each incident as if it's the first time it happens. If this could happen, I think this would kind of resolve and take care of a lot of our issues because we do, every time it happens, it's like it's the first time. We have to reinvent the wheel every time. We have to get to know the players every time, Border Patrol, Coast Guard and Park Service, we're all kind of the same in that people move around a lot. So whoever were the people in charge last year when we had a landing at Everglades, I guarantee are not the ones that are there now. But if we had something in writing, it wouldn't matter.

Least emphasized

No. 16: Border Patrol and National Park Service should meet halfway during transport of immigrants.

NPS_E1: We don't necessarily have the manpower, we don't have the assets to transport more than a handful of people anyway, and if we do, I think it's great if we can meet them halfway. If they can come all the way down, that's fine, if we have to meet them at the entrance of the park, whatever, but I think if you look at what the park service's mission is, us transporting a truck full of illegal aliens around isn't necessarily something why we're here. It's not our day to day operation, and it's not our big master plan. We do deal with it like everything else, we deal with drugs and everything else, but here's a situation where there's a group of people that are specialized and skilled with working with these situations, I would hope that they would want to intervene and take control of the situation as soon as possible.

No. 11: USCBP should focus on cross-border criminal threats.

NPS_E3: That's outside my circle of influence. Their priorities are their priorities. I'm not really going to deal with that. That doesn't enter into my realm of what I can control or what I should be telling my folks to do. Not important to me.

No. 30: Responding agencies should rely on public transportation for transporting immigrants out of a national park.

NPS_E4: I don't think we should rely on public transportation to transport them. It's our only choice right now, or one of three choices. The Yankee Freedom, Coast Guard, or the M/V Fort Jefferson. To put these migrants, we've been very successful, knock on wood, that we haven't had any incidents by putting them on the public ferry, but by putting them there, I'm sure the public has a story that they'll take home and share with everybody forever, that it happened, but there's

still too high of a risk to do that, and when you have twenty, thirty, forty migrants and only one ranger on that boat, the odds are against them.

No. 29: National Park Service should be responsible for transporting immigrants to the Border Patrol station.

NPS_E1: We just don't have the manpower. We don't have the resources for it.

NPS_E4: I understand that the Border Patrol is as short-staffed as the park service is, but for us to take even one person...to take two rangers out of the field to go up there for one or two people, again, looking at the cost effectiveness of that and also the fact that we're taking rangers out of the park and out of their primary mission. Immigration is not one of our missions. You will not see it in the Organic Act, in our mission statements, it's just not there. So, with other agencies who assist us with our mission, we assist them with their mission, but the burden should not be on us to transport them to their processing facility.

No. 26: Relatives should be notified immediately once their family/friends "make dry land."

NPS_E1: I think when they land we've got enough things to deal with. Their families will get notified; if that takes 24, 48 hours, I don't think it has anything to do with what we're doing here.

NPS_E3: That's not an immediate incident management issue that I perceive us to be responsible for. That's something down the road that Border Patrol or ICE or somebody else can deal with. It doesn't even come up on the radar screen for us.

6.3.2 Factor 2: Protect

Factor 2 explained 18 percent of the variance, and one NPS supervisor and two BP personnel aligned with this factor (see Table 3). Factor 2 is called "Protect" because the characterizing statements describe it as a factor with high emphasis on statements involving the protection of the public and responding personnel. The most-emphasized statement in the ideal Q sort for Factor 2 is: "Responding personnel should be prepared for the worst-case scenario," which received the highest z-score (1.776) and rank (3) for this perspective (see Table 6). Two of the most-emphasized characterizing statements

(15 and 10) and four of the least-emphasized statements (1, 24, 5 and 2) are distinguishing statements. All distinguishing statements for Factor 2 are explained in the table on page 59.

As was the case with Factor 1, statement 14 is both highly-emphasized statement and a consensus statement. The least-emphasized statement for Factor 2 is also a consensus statement: No. 25: “Park visitors should help with responses to immigrant landings,” which received the lowest score (-1.656) and rank (-3). Consensus statements for all perspectives are explained in the table on page 62.

Table 6: Characterizing Statements for Factor 2: Protect

Statement	No.	Rank	Z-scores
Responding personnel should be prepared for the worst-case scenario.	15	3	1.776
When BP gets a report of a landing, it should be a priority for BP to get there.	20	3	1.717
The safety of the nation should come before preserving the parks.	10	3	1.622
At least one armed person should watch immigrants all times.	14	2	1.231
USCBP should focus on cross-border criminal threats.	11	2	1.145
Staff should be allowed to build relationships with other agencies.	7	2	1.124
Immigrant “alienage” should be determined by BP or ICE only.	19	2	0.740
If an agency does not have assets it needs, it should rely on other agencies’ assets.	8	1	0.662
Immigrants should be restrained with flexi cuffs.	28	1	0.648
When appropriate, smugglers should be fined for damaging ecological resources.	13	1	0.638
BP and NPS personnel should periodically co-patrol.	6	1	0.624
Male immigrants should be separated from female and child immigrants.	23	1	0.610
BP should drive to EVER and transport immigrants back to BP station.	18	0	0.113

Table 6: Continued

Statement	No.	Rank	Z-scores
There should be a pot of money designated for refunding manpower and equipment.	12	0	0.045
BP and NPS assets should meet halfway during transportation of immigrants.	16	0	-0.003
NPS law enforcement should pursue human smugglers.	17	0	-0.003
NPS should be responsible for transporting immigrants to BP station.	29	0	-0.003
Responding agencies should rely on public transportation to move immigrants.	30	0	-0.072
Officials from each agency should develop a procedure for response.	4	-1	-0.411
Technology should augment personnel responsible for border protection.	27	-1	-0.411
Each agency involved should know about others' goals, issues and constraints.	31	-1	-0.446
Agency personnel without law enforcement training should respond to landings in national parks.	3	-1	-0.572
Other agency personnel should come to my station and see how short-handed we are.	21	-1	-0.583
Respond agencies should know the water and should be able to help without making worse.	1	-1	-1.028
DHS should compensate NPS for all immigrant transportation costs.	24	-2	-1.049
When immigrants "make dry land" it should be managed as a transportation issue.	22	-2	-1.107
Food and clothes should be provided for immigrants immediately after apprehension.	9	-2	-1.166
Relatives should be notified immediately when their family/friends "make dry land."	26	-2	-1.190
Decisions about tactics should be made by personnel on site.	5	-3	-1.467
No agency should handle response to immigrant landings alone.	2	-3	-1.526
Park visitors should help during responses to immigrant landings.	25	-3	-1.656

Characterizing statements $>1/-1$ are highlighted in gray.

Quotes from the two BP personnel and one NPS personnel who aligned with this factor are included in the list below. Supporting explanations for the most-emphasized

characterizing statements are listed first, followed by quotes and explanations for the least-emphasized characterizing statements. This qualitative data assisted with the interpretation of the factors which is included in the Discussion section of this thesis.

Most emphasized

No. 15: Responding personnel should be prepared for the worst-case scenario.

BP_D3: You always have to be ready for the worst-case scenario. It doesn't matter whose to say what kind of people have just landed? You don't know until you get there. You don't know if there's a psycho or a killer or anything, any kind of individual there. As well as Cuba being one of the nations that the department of state considers an international...they harbor, train terrorists, help them be successful, and their goal is to hurt us. They're just 90 miles off the coast.

NPS_E3: It's good to be prepared for worst-case scenario. It's just general incident management.

No. 20: Once BP gets report of a Cuban migrant landing in a national park, it should be a priority for them to get there.

BP_D3: The Border Patrol has responsibility for everything between the ports of entry, so one of the emphases is that Border Patrol needs to be there and make it a priority to be there.

No. 10: The safety of the nation should come before preserving the parks.

BP_D3: I think safety is the first thing to all DHS, its first priority is to protect America. If we can do that as well as preserve the parks, that's good, but I think the priority is protecting America.

No. 14: At least one armed person should watch the immigrants at all times.

BP_D1: This is for officer safety, and in case you really don't know who you have in front of you. It could be a criminal, it could be a smuggler, it could be some type of terrorist, because once there's a Cuban migrant landing, they're not all Cubans sometimes.

NPS_E3: There's about 3% of the Cuban migrants that are actually not permitted to stay in the United States because they've committed crimes in Cuba and that makes them ineligible for citizenship or alien status in the United States. We

need to have some kind of security in place to manage that...so it's important that we protect our people as well as the other migrants if there is one person with a criminal record or is mentally disturbed or whatever.

No. 11: USCBP should focus on cross-border criminal threats.

BP_D3: I think cross-border criminal – all threats – are a priority, not just migrants or narcotics.

No. 7: Staff should be allowed to build relationships with other agencies.

BP_D3: If you can build relationships with the community and law enforcement, then you've multiplied your ability, your force...because we have six stations all over the state. There's hundreds of law enforcement agencies. Not just the Coast Guard or National Park Service...they're just everywhere. We have to be able to...make those networks and connections so they understand what our mission is so they can help us and we can help them with theirs...state, local, tribal.

Least emphasized

No. 1: Responding agencies should know the water and should be able to help without making things worse.

BP_D3: You can't expect the responding agency to know and not make things worse...we want them to make them better, but that's an unreasonable expectation to hold.

NPS_E3: I just think that's beyond the capability of most agencies...to be able to have that kind of knowledge or skill base beyond our patrol area. Even the Coast Guard...it's a huge ocean out there and those folks can't learn everything. Our folks don't even know the entire park. Expecting another agency to come in and know the entire national park area would be beyond anybody's expectations, I think.

No. 24: Department of Homeland Security should compensate National Park Service for all immigrant transport costs.

BP_D3: Compensation, you hear this a lot, especially with local law enforcement. Everybody wants their money. Unfortunately, sometimes it's difficult and we all have our priorities with our different agencies and we all have a requirement to serve the community and serve the public. I have never heard of the patrol saying, pay me and we'll do that. Other agencies do that. That's their prerogative, and we can work that out later, but it shouldn't be something that's discussed ahead of time.

No. 22: When Cuban migrants make dry land, it should be managed as a transportation issue.

BP_D2: It's still a smuggling issue...I mean, it becomes a transportation issue, but at the moment, as a landing, it's not a transportation issue. It's still a criminal smuggling event, so it needs to be handled that way.

BP_D3: It's not a transportation issue, yet. There's other things that need to be taken care of first. Security, the smuggling and transporting aspect of it as far as how they got here, there could be medical issues, there could be narcotics, there could be anything. I mean, the transportation is after you've secured the scene and you've made your initial searches and talked to the people and understand what you have and then you start worrying about transportation.

No. 9: Food and clean clothes should be provided for Cuban migrants immediately after apprehension.

BP_D3: Food is important, water is important, but if they don't have clean clothes, I don't think that's a priority. That's not something that we really help provide. We can make sure they have food and medical attention, but if they want to shave and shower that'll be on their time.

NPS_E3: It depends on the situation and whether you have logistical capability to even do that. You know, at Flamingo we never really dealt with that, it was a relatively short detention. At DRTTO you did, so that's entirely situation dependent and on the logistics you have available to you, so I don't see that as a high priority for every incident.

No. 26: Relatives should be notified immediately once their family/friends "make dry land."

NPS_E3: That's not an immediate incident management issue that I perceive us to be responsible for. That's something down the road that Border Patrol or ICE or somebody else can deal with. It doesn't even come up on the radar screen for us.

No. 5: Decisions about tactics should be made by personnel on site.

BP_D3: You shouldn't be discussing tactics while bickering at a site. So, making tactical decisions once you land there, that's bad.

No. 2: No agency should handle response to immigrant landings by itself.

BP_B4: I think we're all focusing on our own lane.

No. 25: Park visitors should help with response to Cuban immigrant landings.

BP_D1: No. That's not their job. It might be dangerous for them. They should look, report, and leave it alone.

NPS_E3: I would not want to get the public involved just because there's a lot of issues involved with that. It's a liability for us. I guess there have been offers when I've been out at Dry Tortugas from people to help,, and again we have to think about safety of the public. If we had a Haitian landing they have high rates of hepatitis, high rates of tuberculosis, it becomes a public health issue. There might be some role for park visitors for helping out, in a logistical aspect, you know, if it's a long detention and we have to prepare food or something like that...Spanish, that is such a huge issue. I could see that as a reasonable role for translation, it seems legitimate.

6.3.3 Factor 3: Plan

Factor 3 explained 25 percent of the variance, and one NPS supervisor and two BP supervisors aligned with this factor. Factor 3 is called "Plan" because the most-emphasized statements were relevant to building relationships between agencies and working together to outline missions and tasks for a future response to Cuban immigrant landings. The most emphasized statement in the ideal Q sort for Factor 3 is: "Officials from each agency should develop a procedure for response," which received the highest z-score (1.689) and rank (3) for this perspective (see Table 7). One of the most-emphasized statements (1) is also a distinguishing statement: "Responding agencies should know the water and should be able to help without making things worse." The least-emphasized statement for Factor 3 is also a distinguishing statement: "Other agency personnel should come to my station and see how short-handed we really are,"

which received the lowest score (-2.004) and rank (-3). All distinguishing statements for Factor 3 are explained in the table on page 61.

As was the case with Factors 1 and 2, statement 14 is both a highly-emphasized statement and a consensus statement for Factor 3. Consensus statements for all factors are explained in the table on page 62.

Table 7: Characterizing Statements for Factor 3: Plan

Statement	No.	Rank	Z-scores
Officials from each agency should develop a procedure for response.	4	3	1.689
Respond agencies should know the water and should be able to help without making things worse.	1	3	1.476
Immigrant “alienage” should be determined by BP or ICE only.	19	3	1.341
USCBP should focus on cross border criminal threats.	11	2	1.315
At least one armed person should watch the immigrants all times.	14	2	1.038
BP and NPS personnel should periodically co-patrol.	6	2	0.726
Decisions about tactics should be made by personnel on site.	5	2	0.726
When appropriate, smugglers should be fined for damaging ecological resources.	13	1	0.700
DHS should compensate NPS for all immigrant transportation costs.	24	1	0.673
The safety of the nation should come before preserving the parks.	10	1	0.663
When BP gets a report of a landing, it should be a priority for BP to get there.	20	1	0.663
Technology should augment personnel responsible for border protection.	27	1	0.440
BP should drive to EVER and transport immigrants back to the BP station.	18	0	0.351
Each agency involved should know about the others’ goals, issues and constraints.	31	0	0.351
No agency should handle response to immigrant landings alone.	2	0	0.137
Male immigrants should be separated from female and child immigrants.	23	0	0.127

Table 7: Continued

Statement	No.	Rank	Z-scores
If an agency does not have the assets it needs, it should rely on other agencies' assets.	8	0	0.012
When immigrants "make dry land" it should be managed as a transportation issue.	22	0	-0.040
There should be a pot of money designated for refunding manpower and equipment.	12	0	-0.077
Responding personnel should be prepared for the worst-case scenario.	15	-1	-0.186
Staff should be allowed to build relationships with other agency staff.	7	-1	-0.301
NPS law enforcement should pursue human smugglers.	17	-1	-0.326
Immigrants should be restrained with flexi cuffs.	28	-1	-0.399
NPS should be responsible for transporting immigrants to BP station.	29	-1	-0.826
BP and NPS assets should meet halfway during transportation of immigrants.	16	-2	-1.014
Agency personnel without law enforcement training should respond to landings in national parks.	3	-2	-1.040
Food and clothes should be provided for immigrants immediately after apprehension.	9	-2	-1.254
Responding agencies should rely on public transport to move migrants.	30	-2	-1.566
Park visitors should help during responses to immigrant landings.	25	-3	-1.576
Relatives should be notified immediately when their family/friends "make dry land."	26	-3	-1.817
Agency personnel should come to my station and see how short handed we are.	21	-3	-2.004

Characterizing statements > 1/-1 are highlighted in gray.

Quotes from the two BP personnel and one NPS personnel who aligned with this factor are included in the list below. Supporting explanations for the most-emphasized characterizing statements are listed first, followed by quotes and explanations for the least-emphasized characterizing statements. This qualitative data assisted with the

interpretation of the factors which is included in the Discussion section of this thesis.

Most emphasized

No. 4: Officials from each agency should develop a procedure for response.

BP_D1: Well, each agency has to develop their own, and then I think all agencies should get together and talk about it. Either that should be one common mission to go get them, or they can each have their own plan.

NPS_E2: I think something simple as an MOU would be fine. I mean, we would know, written all up, what the standards are for a response here. We don't have that. So with Miami Dade we have MOU, with Monroe County I think we have one, but there's nothing federally to federally.

No. 1: Responding agencies should know the water and should be able to help without making things worse.

BP_D1: Well, you know, it's very dangerous on the water. If you really don't know what you're doing on the water, you don't belong on the water. Even out on the inter-coastal, so you shouldn't do that. Especially when you're going out to Dry Tortugas. What is it, 50 miles? It's about an hour. You shouldn't go out there...the weather, currents, hazards, you don't belong. You don't know what's out there.

NPS_E2: They should know the water before they come over here. That could come from doing ride-alongs, coming over to visit us before the incidents happen, that could easily be taken care of.

No 19.: Immigrant "alienage" should be determined by Border Patrol or Immigration & Customs Enforcement.

BP_D2: That's spelled out by law, that we have the authority to do that, whereas other folks do not. And so, one of the concerns that I get is when we receive calls from other agencies that say, "We've got an illegal alien in custody." Well, they don't have the authority to determine that, so it's sort of a constant reminder to say you have somebody in custody and you'd like for us to come check them out.

NPS_E3: That's usually something that takes more time, involves interviews, again you need somebody with the language skills to do that, and I don't really see that as our role. That should definitely be something Border Patrol or ICE does. That's not something we really should be involved in. I don't see that as our role and function.

No. 14: At least one armed person should watch the immigrants at all times.

BP_D1: This is for officer safety, and in case you really don't know who you have in front of you. It could be a criminal, it could be a smuggler, it could be some type of terrorist, because once there's a Cuban migrant landing, they're not all Cubans sometimes.

NPS_E2: Yeah...one armed person at all times so you can deal with whatever comes up or if they need to call more people in. At some point it gets to be too many people for one armed person to deal with. The ratio gets off and you still don't know who you're dealing with. At no time that you're with the immigrants do you know who they are and what they've done. So just having one guy there with a gun is not really doing anything.

Least emphasized

No. 16: Border Patrol and National Park Service assets should meet halfway during transport of immigrants out of a national park.

BP_D1: I don't think it's their job, to transport – NPS – it shouldn't be their job. We don't have the assets to do it, so we have to rely on somebody else, but it shouldn't be their job to transport halfway. We can't do it, we don't have any boats. Over the road...we have the assets to go get them. We have the vans to go get them, we have the personnel to go get them, just wait for us and we'll go pick them up.

No. 3: Agency personnel without law enforcement training should respond to landings in national parks.

BP_D2: I guess they could, and if someone were out there, I guess if they see it they would do what they need to do, but as far as responding to it, and again I'm coming at it from a crime perspective, if they've broken the law, we don't need to send somebody out there that's not involved in law enforcement.

NPS_E2: Agency personnel without law enforcement; we don't want to deal with anybody that doesn't have a gun for the first response part of it. Once we get them back to shore and we're dealing with them as migrants and they're getting ready to become citizens of the United States, then we can use unarmed personnel. While they're on the beach and we don't know who they are, what they are, what they got in their bags and stuff, it's best to have law enforcement doing that.

No. 9: Food and clean clothes should be provided for Cuban migrants immediately after apprehension.

NPS_E2: Hopefully we're not with them long enough to deal with food and clothes. Hopefully by the time we get them back, Border Patrol is here and ready to take them away. If we're having to deal with food and clothes, that means that we've had them way too long as park rangers. They need to be gone by the time we need to deal with that.

No. 30: Responding agencies should rely on public transportation.

NPS_E2: "They shouldn't use it. We still don't know what they've done before they left Cuba. To me, that's a liability for the government. It's just a matter of when it happens...I emphasize when they leave the beach, you don't know who you're dealing with...The Yankee Freedom is not transportation for the migrants. It's not right. It just takes one person to mess up their experience that they paid good money for, to go across there, and it's not right. I put that in the same category as going canoeing in the backcountry and a helicopter hovers over you the whole time you're trying to be out in the Wilderness."

No. 25: Park visitors should help with response to Cuban immigrant landings.

BP_D1: No. That's not their job. It might be dangerous for them. They should look, report, and leave it alone.

NPS_E2: We don't want park visitors at all around us while we're dealing with migrant landings because there's too much liability involved.

No. 21: Agency personnel should come to my station and see how short handed we really are.

BP_D2: I can kind of guess where that's coming from, and unfortunately that's true, but that's still our responsibility, so we're never going to emphasize that.

6.4 Distinguishing Statements

6.4.1 Factor 1: React & Transport

Distinguishing statements set each perspective apart from the others. Four distinguishing statements (18, 12, 2 and 15) are most-likely to be emphasized by those who align with Factor 1, and five distinguishing statements (1, 19, 10, 23 and 11) are

least-likely to be emphasized by those who align with Factor 1. All statements in Table 8 are significant at $p < .05$, and those marked with an asterisk are significant at $p < .01$.

Table 8: Distinguishing Statements for Factor 1: React & Transport

		Factors					
		1		2		3	
Statement	No.	Rank	Score	Rank	Score	Rank	Score
BP should drive to EVER and transport Cuban immigrants back to the BP station.	18	3	1.39*	0	0.11	0	0.35
There should be a pot of money designated for refunding workforce and equipment utilized during a response.	12	2	1.25*	0	0.04	0	-0.08
No agency should handle response to Cuban immigrant landings alone.	2	1	0.98	-3	-1.53	0	0.14
Responding personnel should be prepared for the worst-case scenario.	15	1	0.92	3	1.78	-1	-0.19
Responding agencies should know the water and should be able to help without making things worse.	1	0	-0.26	-1	-1.03	3	1.48
Immigrant alienage should be determined by BP or ICE only	19	0	-0.49*	2	0.74	3	1.34
The safety of the nation should come before preserving the parks.	10	-1	-0.51*	3	1.62	1	0.66
Male immigrants should be separated from female and child immigrants during a response.	23	-2	-0.99*	1	0.61	0	0.13
BP should focus on cross-border criminal threats.	11	-2	-1.20*	2	1.15	2	1.32

($P < .05$; Asterisk (*) Indicates Significance at $P < .01$); Both the Factor Q-Sort value and the normalized score are shown.

6.4.2 Factor 2: Protect

Two distinguishing statements (15 and 10) are most-likely to be emphasized by those who align with Factor 2. Two distinguishing statements (16 and 29) fall in the

middle of the distribution with factor arrays of 0. This means that those participants aligning with Factor 2 feel indifferent about those statements, but they are distinguishing statements for Factor 2 statements 16 and 29 are least-likely to be emphasized by personnel with Factor 1 or Factor 3. Six distinguishing statements (30, 4, 1, 25, 5 and 2) are least-likely to be emphasized by those who align with Factor 2. All statements in Table 9 are significant at $p < .05$, and those marked with an asterisk are significant at $p < .01$.

Table 9: Distinguishing Statements for Factor 2: Protect

		Factors					
		1		2		3	
Statement	No.	Rank	Score	Rank	Score	Rank	Score
Responding personnel should be prepared for the worst-case scenario.	15	1	0.92	3	1.78	-1	-0.19
The safety of the nation should come before preserving the parks.	10	-1	-0.51	3	1.62	1	0.66
BP & NPS assets should meet halfway when transporting immigrants out of the parks.	16	-2	-1.06	0	0.00	-2	-1.01
NPS should be responsible for transporting immigrants to the BP station.	29	-3	-1.54	0	0.00	-1	-0.83
Responding agencies should rely on public transportation to move immigrants.	30	-3	-1.34	0	-0.07*	-2	-1.57
Officials from each agency should develop a procedure for response to Cuban immigrant landings.	4	2	1.07	-1	-0.41*	3	1.69
Responding agencies should know the water and should be able to help without making things worse.	1	0	-0.26	-1	-1.03	3	1.48

Table 9: Continued

		Factors					
		1		2		3	
Statement	No.	Rank	Score	Rank	Score	Rank	Score
DHS should compensate NPS for all Cuban immigrant transportation costs.	24	1	0.80	-2	-1.05*	1	0.67
Decisions about tactics should be made by personnel on site.	5	2	1.32	-3	-1.47*	2	0.73
No agency should handle response to immigrant landings alone.	2	1	0.98	-3	-1.53*	0	0.14

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort value and the normalized score are shown.

6.4.3 Factor 3: Plan

Three distinguishing statements (1, 10 and 20) are most-likely to be emphasized by those who align with Factor 3. Three distinguishing statements (31, 2 and 22) fall in the middle of the distribution with factor arrays of 0. This means that those participants aligning with Factor 3 feel indifferent about those statements, but they are distinguishing statements for Factor 3 because statements 31, 2 and 22 are least-likely to be emphasized by personnel with Factor 1 or Factor 2. Three distinguishing statements (15, 7 and 21) are least-likely to be emphasized by those who align with Factor 2. All statements in Table 10 are significant at $p < .05$, and those marked with an asterisk are significant at $p < .01$.

Table 10: Distinguishing Statements for Factor 3: Plan

		Factors					
		1		2		3	
Statement	No.	Rank	Score	Rank	Score	Rank	Score
Responding agencies should know the water and should be able to help without making things worse.	1	0	-0.26	-1	-1.03	3	1.48*
The safety of the nation should come before preserving the parks.	10	-1	-0.51	3	1.62	1	0.66
When BP gets a report of a landing in a national park, it should be a priority for BP to get there.	20	3	1.45	3	1.72	1	0.66
Each agency should know about others' goals, issues and operational constraints.	31	-1	-0.53	-1	-0.45	0	0.35
No agency should handle response to immigrant landings alone.	2	1	0.98	-3	-1.53	0	0.14
When immigrants "make dry land" it should be managed as a transportation issue.	22	-1	-0.86	-2	-1.11	0	-0.04
Responding personnel should be prepared for the worst-case scenario.	15	1	0.92	3	1.78	-1	-0.19*
Staff should be allowed to build relationships with other agencies.	7	1	0.46	2	1.12	-1	-0.30
Other agency personnel should come to my station see how short-handed we really are.	21	0	-0.28	-1	-0.58	-3	-2.00*

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort value and the normalized score are shown.

6.5 Consensus Statements

Consensus statements are those that do not distinguish between any pair of factors. All of the statements in Table 11 represent areas where the NPS and USCBP might find some common interests and shared expectations for tasks and teams responding to Cuban immigrant landings.

Table 11: Consensus Statements for all Three Factors

		Factors					
		1		2		3	
Statement	No.	Rank	Score	Rank	Score	Rank	Score
Agency personnel without law enforcement training should respond to landings in national parks.	3*	0	-0.33	-1	-0.57	-2	-1.04
BP and NPS personnel should periodically co-patrol.	6*	1	0.52	1	0.62	2	0.73
Food & clothes should be provided for immigrants immediately after apprehension.	9*	-1	-0.66	-2	-1.17	-2	-1.25
When justified, smugglers should be fined for damaging ecological resources.	13*	0	0.31	1	0.64	1	0.70
At least one armed person should watch immigrants at all times.	14*	2	1.31	2	1.23	2	1.04
NPS law enforcement officers should pursue human smugglers.	17	-2	-0.87	0	0.00	-1	-0.33
Park visitors should help during response to immigrant landings.	25	-1	-0.86	-3	-1.66	-3	-1.58
Relatives should be notified immediately when their family “makes dry land.”	26*	-3	-1.85	-2	-1.19	-3	-1.82
Technology should augment personnel responsible for border protection.	27	0	0.26	-1	-0.41	1	0.44
Each agency should know about the others’ goals, issues and operational constraints.	31	-1	-0.53	-1	-0.45	0	0.35

6.6 Reliability and Validity

Before proceeding to the discussion of the results, it is important to note the reliability and validity of this Q study. In terms of reliability, factor analysis identified three distinct factors which represent distinct patterns of response (Addams & Proops, 2000), and at least three Q sort participants loaded onto each factor. In other words, at least three Q sort participants defined each factor, or social perspective.

In terms of validity, the Q sort participants sorted and defined their own perspectives about response to Cuban immigrant landings in national parks. The instrument used to measure participants' opinions and attitudes about those responses was grounded in the opinions and attitudes provided by news articles and interviews with BP and NPS personnel. The researcher did not approach the study with a pre-determined instrument, thereby eliminating some bias. Also, factor analysis is a validity check (McDonald, 1985) in that it measured what the researcher set out to measure – perspectives – by grouping patterns of response into three factors. These resulting factors, or social perspectives, were expressed and interpreted using supporting explanations from the participants' interpretation of their own Q sorts. Factor analysis yields “a handful of underlying variables that account for changes among a much larger group of measured variables” (Tuler & Webler, 2009, pg. 98), and text from the interviews with key informants, news reports and relevant case studies provided a narrative that explained the complexities of each perspective.

7. DISCUSSION

The purpose of this study was to identify perspectives among federal agency personnel about tactics for response to Cuban immigrant landings in south Florida's national parks. Personnel from three federal agencies (NPS, BP, USCG) participated in semi-structured interviews that revealed the discourse regarding Cuban immigrant landings and response, or all the things that are being said about this topic. Personnel from two federal agencies (NPS and BP) participated in the Q sorts and ranked statements about response to Cuban immigrant landings as those they would most-likely emphasize in a future response to those they would least-likely emphasize. This ultimately led to the revelation of three factors, or social perspectives, among federal agency personnel about response to Cuban immigrant landings: 1.) React & Transport, 2.) Protect and 3.) Plan.

7.1 Shared Mental Models

To review, a shared mental model (SMM) is a perspective informed by knowledge and observations that provides a source for expectations about a given task and guides coordination for completing the task (Cannon-Bowers, 1993). Following Cannon-Bowers' (1993) interpretation of SMM theory in terms of expectations, it is the expectations that must be shared – not necessarily the mental model. This is because “the most important function of SMMs is that they lead to common expectations of the task and team” (pg. 235). Therefore, this study is guided by the following research questions:

1.) How do the federal agencies operating along the southeastern border in Florida work together during responses to Cuban immigrant landings within national parks?

2.) What are the perspectives among agency personnel about tactics for response to Cuban immigrant landings within national parks?

3.) What tactics should be emphasized in future responses?

Each factor is discussed below drawing from the themes outlined in Table 1, shown on page 26.

When a Cuban immigrant landing occurs in EVER or DRTO, NPS and BP personnel are called to respond. Based on the results of data analysis, these agencies share expectations for certain things that should be done during a response to a Cuban immigrant landing, but they do not necessarily share mental models of how to fulfill those expectations. For example, NPS and BP personnel seem to share an expectation that Cuban immigrants should be removed from the national parks and transported to an immigrant processing facility, but the three factors revealed through Q method suggest that these agency personnel hold different mental models for how that should be accomplished. According to Cannon-Bowers (1993), mental models for effective team performance need not be the same among team members, just compatible.

7.2 Factor 1: React & Transport

Personnel aligning with Factor 1: React & Transport (Reactors, hereafter) prioritize statements about tasks involving the transportation of Cuban immigrants and relying on other agencies that have the assets needed to do so (statements 20, 18, 8).

Reactors are more concerned about decisions that need to be made immediately after a landing occurs and are less concerned with elements of team interactions that could help personnel prepare for a future landing, such as co-patrolling, building relationships with other agency personnel or learning about other agencies' goals, issues and operational constraints (statements 6, 7, 31). The tactics that Reactors are least-likely to emphasize are also about tasks involving transportation, but they are specific to which agency should carry out certain responsibilities during a response.

One particular transportation issue distinguished Factor 1 from the others. The transportation of Cuban immigrants from Flamingo Station in EVER to the USCBP station can generate some conflict between the agencies. Personnel had several different opinions about how that should take place (statements 16, 18 and 29). All four of the NPS personnel who aligned with Factor 1 highly emphasized that BP should drive to Flamingo Station in EVER and transport immigrants back to the BP station (statement 18). Some BP agents reported that it would be helpful if EVER law enforcement would meet them halfway with the immigrants or drive them all the way to BP station themselves. Both agencies cite a lack of adequate resources (no large buses for NPS; not enough manpower for USCBP) as reasoning for their positions on the issue. Here, the implication for managers and supervisors in both agencies is not to assume that every person understands their role, responsibilities or tasks with transportation. Interestingly, this statement does not help characterize Factors 2 or 3, which indicates that assigning the role of transportation to BP is more important to Reactors than to other personnel.

Another task that requires clarification is the determination of “alienage;” who is authorized to identify immigrants as a certain nationality? When a large group of people appears on an isolated beach 15 minutes away from Flamingo Station without boats, fishing poles, or tents, EVER law enforcement officers typically contact BP and report that they have detained a group of Cuban immigrants at Flamingo Station. However, according to BP agents, immigrant “alienage” should be determined by BP or ICE only (statement 19). BP personnel reported that there are often misunderstandings and miscommunications because EVER personnel repeatedly identify immigrants as Cuban when they do not have the authority to do so.

Here, it is worth noting that sorting the Q statements was an informative experience for some of the participants. Statement No. 19 was an opinion that some personnel in the NPS has not considered before, and they mentioned that it was helpful to understand this idea that was so different from their own. NPS_E4 explained:

This was the first time I ever heard of it...didn't even think about it. To us, it was quite obvious...we were able to determine who they are and that they did come from Cuba and that they were Cubans. So, if that's an assumption on our part that we shouldn't make, we can change the way we do business...Our role and function is to respond to get as much information we can get for our documentation, but definitely not to process them. I don't even want to start going in there. I want to stick to our mission. Our mission is not immigration. Our mission is not border protection. I think it's important that we keep those two separate.

7.3 Factor 2: Protect

Personnel aligning with Factor 2: Protect (Protectors, hereafter) prioritize statements about tasks involving the protection and safety of agency personnel and the general public (statements 15, 10, 14 and 11). Protectors are less concerned with tasks

involving humanitarian aid (statements 9 and 26) or tasks involving the mitigation of immigration response impacts on budgets (statements 12 and 24). Statement No. 15 is most-likely to be emphasized by personnel aligning with Factor 2: Responding personnel should be prepared for the worst-case scenario. This result is similar to findings on the national park law enforcement shift from a historical focus on providing recreation opportunities and resource protection to a current emphasis on visitor safety (Wynveen et al., 2007).

Despite Protectors' emphasis on ensuring the safety of responding personnel, those who aligned with Factor 2 placed low emphasis on handling response to Cuban landings with other agencies (statement 2). There is an element of autonomy in Factor 2, which is similar to Piekelek's (2009) findings along the southwestern border where federal land management agencies and border protection agencies struggled to find ways to coordinate for some time, and often resorted to "staying in their own lanes." Even so, there is potential for collaboration among personnel aligning with Factor 1: React & Transport and Factor 3: Plan, in that personnel aligning with both factors highly emphasized statements about fostering team interactions (statements 2, 4 and 7).

Finally, statement No. 10 is a distinguishing statement worth noting: The safety of the nation should come before preserving the parks. This further illustrates the suggestion that Protectors emphasize protection of the public and agency personnel first and foremost. This debate has been occurring wherever public lands meet a U.S. border, especially along the southwestern border. BP agents and NPS personnel have had conflicts regarding differing missions and operations in areas designated as Wilderness.

Law mandates that no mechanized vehicles may be used in designated Wilderness. BP agents have driven through Wilderness in the pursuit of illegal immigrants which has damaged ecological resources. For a time, both agencies felt that the other was hindering their mission, but steps have been taken to foster a more cooperative atmosphere among agencies operating along the southwest border. While agencies in the southeast do not have the same issues regarding damage to ecological resources, similar agency culture is evidently present. NPS_E3 best explains an opposing view, in line with Factors 1 and 3:

I think they're almost the same thing, they're hand in hand. Especially, not just our experience here with the migrants in south Florida, but also the southwest border. They go hand in hand. Border security and damaging natural resources from human or migrant smuggling or drug smuggling, it's the same thing. It's one in the same in my mind. That I didn't really see as an issue.

7.4 Factor 3: Plan

Personnel who aligned with Factor 3: Plan (Planners, hereafter) are proactive in their approach to response to Cuban immigrant landings, and they emphasize elements of team interactions such as communication and utilizing available personnel during a response (statements 1 and 4). Planners also stressed the need to plan ahead and outline a written procedure for response or establish a Memorandum of Understanding between agencies involved. Each agency has its own policies and procedures for response; some are written, some are not, but there is currently no written *coordinated* procedure for response to Cuban immigrant landings. Planners' high emphasis on teamwork and their desire to outline a written procedure for response suggests an acknowledgement of the problem of interagency coordination which, according to Smith and Dowell (2000), lies in the interaction between the structure of the emerging disaster management system and

the techniques of individual and team decision-making. In other words, Planners seem to be willing to gain a better understanding of each agency's decision-making techniques in order to coordinate those techniques into a more effective disaster (or incident, in this case) management system.

7.5 Consensus Statements: Points of Agreement between all Factors

In a Q study, consensus statements do not distinguish between any factors revealed through the data analysis. Consensus statements are points of agreement between the three factors that were identified. They are starting blocks for agencies to begin to understand where their mental models and frames of the problem align.

All participants – personnel who aligned with Factors 1, 2 and 3 – emphasized handling Cuban immigrant landings as a law enforcement situation (statements 3, 13, 14 and 25) rather than a transportation situation, despite the strong emphasis on transportation by Reactors. Although there is a reported “all-hands-on-deck” policy among NPS personnel who respond first to a Cuban immigrant landing, and despite the reported lack of resources and manpower available in either agency for response, personnel in both the NPS and BP agree that those without law enforcement training should not be immediately involved in the approach and apprehension of immigrants.

This is further supported by the unanimous high emphasis on statement No. 14: At least one armed person should watch the immigrants at all times. Despite past cases when, due to a lack of available personnel, non-law enforcement personnel have assisted with watching immigrants while in NPS detention, all participants acknowledge once again that it should be treated as a law enforcement situation and personnel should be

prepared for the worst-case scenario. All BP agents have law enforcement training, so anyone involved in a response to a Cuban immigrant landing without law enforcement training would be NPS personnel such as Visitor Services staff or Interpretive Rangers. In the past, these personnel have reportedly assisted with communication efforts between agencies in both EVER and DRTO, but they have been especially utilized at DRTO given its distance from the mainland and law enforcement backup. Non-law enforcement personnel have helped keep watch over groups of immigrants on DRTO while waiting for the USCG or the F/V Yankee Freedom II to arrive and transport the immigrants off the island. Non-law enforcement personnel have also helped clean-up chugs and the Cuban quarters in Fort Jefferson on DRTO after the immigrants have been transported to the BP station. Given the unique situation presented by Cuban immigrant landings and the lack of available assets and resources in both NPS and BP, it is understandable that participants from both agencies feel somewhat flexible about who can be involved in an immigrant landing response. While personnel from both agencies emphasize handling Cuban immigrant landings as law enforcement situations, the role non-law enforcement personnel should carry out during each response needs to be defined.

All participants also agreed on points about team interactions and building relationships between agencies (statements 6 and 31). One team interaction developing tactic was agreed upon by Q sort participants as something that should be emphasized in the future: No. 6: NPS and BP personnel should periodically co-patrol. The size of EVER, the nature of the terrain within park boundaries and its distance from BP headquarters in Pembroke Pines and stations in Dania Beach and Marathon have

reportedly inhibited BP's access to the area. Another major factor hindering BP's access to the area is their lack of marine vessels. This presents an opportunity for BP and the NPS to work together.

Interestingly, another team interaction tactic was agreed upon among Q sort participants as something that should not be emphasized in the future, despite reported interest from interview participants: No. 31: Each agency needs to know about the others' goals, responsibilities, budget issues and operational constraints. According to Reactor NPS_E4:

I don't think that really has any bearing on this issue. I don't really know or care what the Border Patrol's budget is. I do know that they are short-staffed, I do know that they don't have big boats, things like that. Minding our own business is a full-time job. I don't need to mind their business.

However, interview participants expressed interest in understanding the status of other agencies involved. NPS_A9 shared this opinion:

I have talked with one guy at USCG base. We were walking through and got to talking and he said, oh man I think you guys have the coolest job and I'd love to work with you and do this kind of training. So he expressed interest, which was awesome. I think that would be great, especially with the different jurisdictions, different missions, but all kind of dealing with the same situation. We have to be able to work together. I don't know where they stand as far as funding goes and things like that, besides overall economic status of the country, I don't know what they're getting cut back on. It's good for me to know that if they're facing the same issues that we are, as far as this is getting cut and this is getting cut, and they're getting told from the higher ups to not do this or this, it's good for us to know that they're working within bounds, as well.

This statement illustrates a frustration held by other NPS personnel regarding their lack of understanding of how other agencies operate and what their tasks and expectations are for response to Cuban immigrant landings. In other words, some study participants do not share a mental model of team interactions or how that should be achieved. Also

some participants in management positions do not understand what their staff's information needs are – within the same agency. There is a desire among some personnel to develop a shared understanding of each agency's capabilities and available assets. When NPS personnel are sitting with a group of Cuban immigrants on DRTO and waiting for USCG to arrive, they want to feel assured that back-up from USCG and/or BP will arrive as quickly as possible. When back-up can not arrive within 24 hours, NPS personnel are left feeling like they are at the bottom of the priority list dealing with a task that falls outside their mission without a clear understanding of why the agency that is responsible can not quickly assist. Understanding the other agencies' goals, issues and operational constraints might alleviate some of that frustration.

Finally, Q sort participants agreed that tasks involving humanitarian aid (statements 9 and 26) are not an immediate concern during response to Cuban immigrant landings. Local citizens and park conservation interest groups have donated clothes and food which NPS personnel do provide to Cuban immigrants, particularly on DRTO, but they do so after the time they define as “response.” Humanitarian aid takes place after initial law enforcement tasks have been carried out, after everyone is checked for medical issues, and while the Cuban immigrants are detained until USCG or BP arrives to assist. NPS and BP participants do share expectations for humanitarian aid and how that element of response to Cuban immigrant landings should be handled. It is a task that is least-likely to be emphasized in the grander scheme of response, but not disregarded altogether.

These consensus statements illuminate areas where the NPS and BP share expectations and emphases about tactics for response to Cuban immigrant landings. Differing agency cultures and missions do exist, so entire mental models may never be shared between agencies, but there is potential for managers from both agencies to identify common interests and expectations for the tasks and for the teams responding to Cuban immigrant landings. Based on the consensus statements revealed through data analysis, areas of common interest and shared expectations include handling a Cuban immigrant landing as a law enforcement situation, striking a balance between protecting responding personnel and utilizing available personnel without law enforcement training, building teamwork and relationships between agencies, and focusing immediate response resources on areas other than humanitarian aid. These areas of agreement are starting blocks for agencies to build upon as they begin to understand the interests and expectations they share for response to Cuban immigrant landings in national parks.

8. IMPLICATIONS FOR MANAGEMENT

Managers in the NPS and BP expressed interest in writing a procedure for response or establishing a Memorandum of Understanding between agencies involved regarding response to Cuban immigrant landings. The desire to outline tasks and procedures for response is essentially a desire to outline shared expectations for the tasks and teams. In order to identify shared expectations for response, personnel need to understand how everyone involved views response, or how they frame the problem. The perspectives revealed through this Q study provide an understanding of how different personnel view tactics for response and how they should be emphasized in a future response. The perspectives also provide implications for managers in both agencies who want to move forward and improve inter-agency coordination.

8.1 Procedure for Response

Currently, there is no written procedure for response to Cuban immigrant landings in south Florida's national parks. NPS personnel reported that they have to "reinvent the wheel" each time a landing occurs. This could also be in part because of rotating staff in and out of both agencies. Cuban immigrant landings occur infrequently enough that, in one reported NPS case, an entirely new group of personnel was called to respond to a landing, so they sought advice on how to handle the situation by calling personnel who had responded to immigrant landings in the past but had moved on to other positions or parks. BP has rotating retention rates, as well. While there is a phone number NPS personnel can call to alert BP to a landing in the park, the person receiving the call could be different every time.

The circumstances surrounding Cuban immigrant landings in EVER and DRTO demand different procedures for response, as well. Even though landings usually occur on Cape Sable in EVER, one of the furthest points from Dania Beach and Pembroke Pines BP Stations, EVER is on the mainland and USCG does not assist with transporting immigrants off the beach. BP will assist with response, which usually takes no more than one full work-day. DRTO is 70 miles west of Key West, FL, so procedures for response do need to include USCG as an option for transporting Cuban immigrants from DRTO to BP custody in Key West. If these agencies sit down to discuss procedures for response, it will be important to keep priorities and tactical emphases for EVER and DRTO separate.

8.2 Tactic Meetings and Co-Patrols

Discussions about tactics for response to Cuban immigrant landings do not occur frequently between agencies involved – if ever. Participating personnel reported that the meetings that do take place are “Meet ‘n Greet” in nature, and that it has been difficult to move beyond pleasantries to tactics. One case where tactic meetings are working well is the Southwest Florida Organized Smuggling Intelligence Group (SOSIG). NPS_A3 reported:

The task force meeting is good because it keeps people on their toes. We need to allow ground-pounders to attend these meetings – the people on the ground actually responding to incidents. We want our staff to build relationships. NPS staff tend to get burned out pretty quick. We should allow staff to build relationships with other agencies and within the community, then they’ll stick around longer and perform better at work. We should get the other agencies to come visit us. We should host meetings at Big Cypress, then they’ll see what kind of force and terrain we’re working with.

Some personnel hesitated at the thought of adding another meeting to their schedules, and it was suggested by multiple study participants that a better use of time could be engaging in co-patrols of the park boundaries. Co-patrols have great potential for implementation as the perspectives revealed shared an area of interest in and expectations for building teamwork and developing relationships between agencies. Although this study focused on the federal agencies operating in southern Florida, participants expressed interest in coordinating with state and local departments, as well.

8.3 Engage State and Local Departments

SOSIG is attended by multiple state and local departments, including Fish and Wildlife Conservation Commission, Collier County Sheriff's Office and Marco Island Police among others, as well as Border Patrol personnel from the Tampa and Naples stations and National Park Service personnel. Agencies share lunch and swap intelligence about local smuggling operations. NPS_A3 reported that this built camaraderie between agencies.

8.4 Immigrant Landing Account

One study participant described Cuban immigrant landings as analogous to a hurricane: "Every time there's a landing, it affects the entire region." This reflects the fact that law enforcement personnel are pulled from surrounding districts to respond to a landing in EVER, BP personnel located three hours away are called in to respond, and money that was allocated for other things must be spent on reimbursing personnel for overtime, cleaning up biohazards and diesel fuel and removing chugs from the landing site. There is an agreement between DHS and NPS establishing a reimbursement policy

for monies spent by the NPS on transportation. NPS personnel who participated in the study agreed that this does help the parks financially, but it does not solve the problem. Participants made the case for an account in the budget allocated specifically and exclusively for Cuban immigrant landings, much like the hurricane account that already exists. According to NPS personnel, Cuban landings do not happen often, but when they do they drain park budgets.

8.5 Boots on the Ground

NPS personnel also reported that the DHS agreement does not solve the problem because the burden of response still falls on the NPS. They reported a need to have “other agency boots on the ground and boats in the water” assisting with response as soon as possible. Cuban immigrant landings draw NPS workforce away from their daily tasks and overall mission, so they would like to see agencies with missions tied to immigration present in the response efforts. This could be difficult to achieve given the distance between BP stations, EVER and DRTO, and results from the data suggest that there are different expectations between the revealed factors, or perspectives, about team interactions and utilizing available assets and personnel. Even so, the data also reveals the potential and desire that exists among personnel in the NPS and BP to work together and outline shared expectations for the tasks and teams involved with response to Cuban immigrant landings in south Florida’s national parks.

8.6 Shared Expectations

As Cannon-Bowers (1993) explained, mental models provide the context for conceptualizing expectations, so mental models must be compatible in terms of the

expectations they generate. BP and NPS operate under different missions, so coordinated responses between these agencies is, and will continue to be, complex. The end goal of similar research or of future attempts at inter-agency coordination should not be to convert everyone to one mental model or even one mission. That scenario would be very unlikely. Study participants who linked their agency missions to their mental models about team performance and response to Cuban immigrant landings argued positions – the paramilitary, national security mission of BP and DHS versus the friendly park-ranger, preservation/conservation mission of the NPS and DOI. These positions will not change. However, once study participants' responses were grouped into factors, or social perspectives, about response to Cuban immigrant landings, distinguishing and consensus interests were identified. It is these interests and expectations which provide the building blocks for constructing a common procedure for response to landings. In addition to other agencies involved, BP and NPS personnel can move forward with conflict management and inter-agency coordination once they identify shared expectations embedded in their perspectives about response to Cuban immigrant landings in national parks.

9. CONCLUSION, LIMITATIONS AND FUTURE RESEARCH

With these results and implications in mind, there were a few limitations to this research. While Q method is an appropriate method to employ in studies with low numbers of participants, the seven Q sorts conducted in this study was below the researcher's anticipation and goal of 10-15 Q sorts. The seven Q sort participants represented a diverse group of personnel in both agencies: NPS managers, district rangers and law enforcement officers, and BP supervisors and agents, and seven participants do fall within the appropriate range of Q sorts for the number of Q statements in this study (31). Even so, USCG personnel participated in the semi-structured interviews (Step 1.1) but were unavailable to participate in the Q sorts (Step 4), so the participants could have been more diverse. The researcher was unable to schedule any semi-structured interviews or Q sorts with ICE agents, so that agency was not represented in this study. Given that the researcher was in the field for 22 days, time was a limitation as well, and Q method is a time-intensive process. Future investigations employing Q method should consider two separate trips into the field: the first trip should be at least three weeks long in order to conduct interviews, search the literature and gather the concourse, followed by at least two weeks to generate the Q sample, then a second trip to the field for at least one week in order to conduct Q sorts.

This study focused on personnel operating out of three BP stations, one USCG station and two national parks in southern Florida: EVER and DRTO. The sample used in this study – the Q statements – were generated out of the concourse of opinions and attitudes about response to Cuban immigrant landings among personnel working at those

specific locations. These participants are the same people who actually respond to immigrant landings, so the perspectives revealed through data analysis are valid for these stations and parks because the study instrument – the Q sample and statements – was generated by the participants themselves. Future research is needed for other BP and USCG stations and national parks in southern Florida. Biscayne National Park has an entirely different inter-agency coordination situation due to its proximity to municipal services and departments that can provide assistance during response to a landing. National parks located in the Caribbean such as Virgin Islands National Park have different circumstances surrounding their response to immigrant landings as well, including the distance of the park from other agency stations and the nationality of the immigrants they encounter, which may require a different procedure for response. Future research is also needed to understand how Cuban immigrant landings impact the experience of national park visitors. The factors revealed through this study provide baseline data for inter-agency coordination in the southeastern region, but more data must be gathered about the context of each park and other agencies operating within the region.

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APPENDIX A

Agency Missions

- U.S. Coast Guard (USCG): to protect the maritime economy and the environment, defend our maritime borders, and save those in peril (DHS, 2010a, <http://www.dhs.gov/xabout/strategicplan/>).
- U. S. Customs & Border Protection (USCBP): Priority mission: to keep terrorists and their weapons out of the U.S. It also has a responsibility for securing and facilitating trade and travel while enforcing hundreds of U.S. regulations, including immigration and drug laws (DHS, 2010a, <http://www.dhs.gov/xabout/strategicplan/>).
- Immigration & Customs Enforcement (ICE): to promote homeland security and public safety through the criminal and civil enforcement of federal laws governing border control, customs, trade, and immigration (DHS, 2010a, <http://www.dhs.gov/xabout/strategicplan/>).
- National Park Service (NPS): to promote and regulate the use of Federal areas known as national parks, monuments, and reservations...by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations (NPS, 2008).

APPENDIX B

Interview Guide

- 1.) Name, agency, position
- 2.) Immigration can mean many different things in southern Florida. Describe the types of immigration your agency encounters.
 - a.) Which types of immigration (or what kind of scenarios) do you respond to?
- 3.) Where does your agency have jurisdiction? (provide maps) Describe the area where your agency has authority and the means to respond to incidents involving immigration.
- 4.) What are your tasks during a response to immigration at sea? What are your tasks during a response to immigrant beach landings?
 - a.) How do you come to know these tasks?
 - b.) Do the tasks change depending on the nationality of the immigrants? If so, how?
 - c.) Do the tasks change if the immigration occurs in public water or on public lands (i.e. national parks)? If so, how?
- 5.) Describe the procedures/policy you follow during responses to immigrant beach landings in national parks.
 - a.) What are constraints to response?
 - b.) What works well or “goes smoothly” during responses?
- 6.) Describe any “team(s)” you work with during a response to immigrant beach landings in national parks.

- 7.) Describe any equipment you use during a response to immigrant beach landings in national parks.
 - a.) What equipment works well? Could other equipment, if any, do a better job?
- 8.) How do you come to understand the situation – or details – regarding immigrant beach landings in national parks?
 - a.) How do you communicate with personnel in your agency and personnel in other agencies during responses to immigrant beach landings?
 - b.) In what ways is your communication effective/ineffective?
 - c.) Does an evaluation of the process take place afterwards? Is there any follow-up communication within or between agency personnel afterward the landing?
- 9.) Are there other issues or concerns regarding response to immigrant beach landings that we have not discussed? If so, how are they addressed and mitigated?

APPENDIX C

Q Statements

1	Responding agencies should know the water and should be able to help without making things worse.
2	No agency should handle response to immigrant landings alone.
3	Agency personnel without law enforcement training should respond to immigrant landings in national parks.
4	Officials from each agency should develop a procedure for response to Cuban immigrant landings.
5	Decisions about tactics should be made by personnel on site.
6	BP and NPS personnel should periodically co-patrol.
7	Staff should be allowed to build relationships with other agencies.
8	If an agency does not have assets it needs to respond, it should rely on other agencies.
9	Food & clothes should be provided for immigrants immediately after apprehension.
10	The safety of the nation should come before preserving the parks.
11	BP should focus on cross border criminal threats.
12	There should be a pot of money designated for refunding workforce and equipment utilized during a response.
13	When justified, smugglers should be fined for damaging ecological resources.
14	At least one armed person should watch immigrants at all times.
15	Responding personnel should be prepared for the worst-case scenario.
16	BP & NPS assets should meet halfway when transporting immigrants out of national parks.
17	NPS law enforcement should pursue human smugglers.
18	BP should drive to EVER and transport immigrants back to the BP station.
19	Immigrant alienage should be determined by BP or ICE only.
20	When BP gets a report of a landing, it should be a priority for BP to get there.
21	Other agency personnel should come to my station and see how short-handed we really are.
22	When Cuban immigrants “make dry land” it should be managed as a transport issue.
23	Male immigrants should be separated from female and child immigrants during a response.
24	DHS should compensate NPS for all Cuban immigrant transportation costs.
25	Park visitors should help during a response to Cuban immigrant landings.
26	Relatives should be notified immediately when their family/friends “make dry land.”
27	Technology should augment personnel responsible for border protection.
28	Cuban immigrants should be restrained with flexi cuffs.
29	NPS should be responsible transporting immigrants to the BP station.
30	Responding agencies should rely on public transportation move Cuban immigrants.
31	Each agency should know about the others’ goals, issues and operational constraints.

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